

For Reference

NOT TO BE TAKEN FROM THIS ROOM

Ex LIBRIS
UNIVERSITATIS
ALBERTAEENSIS





Digitized by the Internet Archive
in 2020 with funding from
University of Alberta Libraries

<https://archive.org/details/Demers1971>

THE UNIVERSITY OF ALBERTA
DETERRENCE AND THE DEATH PENALTY: AN EXAMINATION
OF THE EVIDENTIAL REQUIREMENTS

BY



DONALD JOSEPH DEMERS

A THESIS
SUBMITTED TO THE FACULTY OF GRADUATE STUDIES
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE
OF MASTER OF ARTS

DEPARTMENT OF SOCIOLOGY

EDMONTON, ALBERTA

FALL 1971

THESIS
1971
64

THE UNIVERSITY OF ALBERTA
FACULTY OF GRADUATE STUDIES

The undersigned certify that they have read, and recommend
to the Faculty of Graduate Studies for acceptance, a thesis entitled
"Deterrence and the Death Penalty: An Examination of the Evidential
Requirements" submitted by Donald J. Demers in partial fulfilment of
the requirements for the degree of Master of Arts.

Date *18 July* 1971.



ACKNOWLEDGEMENTS ARE DUE

To Dr. G. Nettler who chaired my committee and whose critical comments and constant encouragement proved most valuable throughout the writing of this thesis.

To Dr. L. P. Apedaile and Dr. V. Matthews whose encouragement and suggestions never relented throughout the critical periods encountered while the thesis was being written.

To Arlene Lyon and Carol Fjeldsted whose excellent typing produced the final thesis draft as it now appears.

To all of my friends who have made my stay in Edmonton an extremely rewarding one. Thank you for your friendship. I shall long cherish it.

ABSTRACT

This thesis examines the relationship between deterrence and capital punishment. What effect, if any, does the presence or absence of the death penalty exert upon the incidence of homicide?

The empirical work thus far undertaken has failed to provide a conclusive answer to this question. This thesis describes the shortcomings of previous research with respect to this question and proposes procedures that might provide a clearer answer.

A number of research designs are considered with particular attention being paid to their ability to control for plausible rival hypotheses. Problems of data in testing deterrence are also examined. The development of primary sources of data is suggested as a solution to some of these problems. Two procedures employing time series models of analysis are put forth as possible tests of the deterrent efficacy of capital punishment. The weaker procedure involves the utilization of official homicide statistics for a period of twenty-three years from 1950 to 1972. The stronger procedure involves the utilization of primary data for a period of twenty-six years from 1975 to 2000. Regression analysis and the calculation of correlation coefficients are employed in both procedures to determine the influence of variation in the frequency of imposition of the death sentence and

the frequency of execution respectively upon the incidence of culpable homicide and premeditated homicide. These research procedures, it is suggested, will allow for tests of the deterrent influence of capital punishment.

TABLE OF CONTENTS

CHAPTER	PAGE
INTRODUCTION	1
I. LAW, SOCIAL CONTROL AND PUNISHMENT	4
Punishment - Meaning and Justification. . .	7
Retribution	9
Rehabilitation	11
Incapacitation	12
Deterrence	13
II. CAPITAL PUNISHMENT	20
Capital Punishment - Pros & Cons.	20
Scripture	21
Retribution.	21
Economy	22
Unequal Application.	23
Errors in Justice.	24
Administration of Justice.	25
Protection of Society.	25
Deterrence - An Examination	28
Conclusion.	33
III. TESTING THE DETERRENT THEORY OF CAPITAL PUNISHMENT	38
Hypotheses.	39
Bases for Inference	40
Correlation.	41

	Causal Order	41
	Control of Other Possible Causal Factors . .	42
	Procedures for Testing Hypotheses	43
	The Application of Law	44
	The Influence of the Death Penalty Per Se. .	45
	The One-Shot Case Study.	47
	One-Group Pretest Posttest Design.	48
	Static-Group Comparison.	49
	Time Series Design	50
	Nonequivalent Control Group Design	50
	Multiple Time Series Design.	51
IV.	DATA PROBLEMS IN TESTING DETERRENCE.	55
	The Deficiencies of "Official" Statistics . . .	55
	Variation in Motives for Murder	57
	Hidden Homicide	59
	Labelling Variations in Homicide Rates.	60
V.	MODELS OF ANALYSIS	67
	Theoretical Framework	67
	Research Procedures	69
	Model I	70
	Model II	74
	Conclusions	77
	Epilogue.	79
	BIBLIOGRAPHY	84

INTRODUCTION

Every system of legal sanctions is justified by reference to certain objectives and/or functions which it strives to achieve and/or claims to fulfill.¹ A valuable task which can be performed, therefore, is the empirical investigation of the extent to which a criminal sanction approximates the accomplishment of its objectives. One of the principal objectives of our legal system is that of deterrence. According to the deterrence theory, the threat of punishment is sufficient to dissuade potential criminal offenders. The problem which then arises is that of isolating and measuring the deterrent power of law.

The question of deterrence has often been posed with respect to the issue of capital punishment. Does the threat of execution discourage potential murderers? A considerable amount of time and energy has been devoted to the formulation of answers to that question. This thesis attempts to contribute toward the resolution of the issue of the deterrent influence of the death penalty through an examination of the evidential requirements of inference as to the deterrent effect of capital punishment.

The first chapter considers the meaning of punishment and its justifications - retribution, rehabilitation, incapacitation, and deterrence. Chapter II consists of an examination of the empirical

work done to date with reference to the deterrent influence of the death penalty. The third chapter presents a number of research procedures which could be employed in evaluating the relationship between the incidence of homicide and the threat of execution. Chapter IV examines data problems in testing deterrence. The final chapter presents two models for analyzing the deterrent influence of the presence of the death penalty: a strong test based upon the utilization of "primary" sources of data, and a weaker test based upon the use of official, criminal statistics.

FOOTNOTES

¹A "rational" model of behavior will be employed in this thesis. It should be kept in mind, however, that this conceptualization is no more than a model, a tool. To be rational is to act purposively toward the achievement of an empirical goal with the most economic means. The goals of punishment - rehabilitation, retribution, incapacitation, and deterrence - are treated here as if they were rationally constructed objectives. The irrational and non-rational aspects of the legal system should not be ignored, however. The aforementioned legal objectives can also be seen as "crescive" rather than "constructed." That is, many aspects of our system of criminal sanctions were not designed in order to achieve some specified end. Rather, they originated as ends-in-themselves. After the fact, "reasons" were given in order to justify the acts. One must not, therefore, confuse the justification of behavior with its motivation. See G. Nettler, "Knowing and Doing," presented at the Conference on Social Science Research and Social Policy, Edmonton, Alberta, 1971, pp. 49-51.

CHAPTER I

LAW, SOCIAL CONTROL AND PUNISHMENT

Every human group, if it is to subsist, requires of its members that they conform to common rules and it will force them to do so. The creation and maintenance of social interaction between human beings rests upon the establishment of predictability with respect to their behavior. At the societal level, means must be developed which will insure this predictability. In other words, methods of procuring and protecting "social order" must be brought into play. The process by which social order is maintained; i.e., by which conflicts are in some manner rendered ineffective is that of social control. The character of this process varies with the type and size of the group in question; and controls may be classified along several dimensions. Social control may be exerted unconsciously or deliberately, and the individuals so affected may or may not be aware of the process.¹ The concept "social control" can encompass all of the diverse actions which may be said to influence conduct toward conformity. Specific means of control may be classified along the dimension or continuum of formality. This thesis will concern itself with formal social control mechanisms, i.e., legal rules. Finally, all means of social control involve some kind of reward or penalty. To these penalties and rewards the terms negative and positive sanctions are respectively applied. In sum, social control facilitates social order by the reinforcement of shared understandings

with respect to social behavior.

While informal methods of social control may suffice in small, homogeneous human communities, the complexity of life in urban, technological societies carries with it an increasing reliance upon formal means of control. These formal measures are characterized by: a) explicit conduct-rules, b) planned invocation of sanctions to enforce the rules, and c) designated officials to enforce and interpret the regulations, and often to create them.² Although informal control mechanisms such as gossip and praise remain influential, the increasing complexity of social organization renders the operation of formal controls essential. Law is the fundamental formal control measure. As employed here, law will be defined as:

"the formal means of social control that involves the use of rules that are interpreted, and enforceable, by the legitimately-appointed representatives of a political community."³

One of the biggest problems that confronts those individuals interested in the process of law is the lack of consensus with respect to the origin and nature of legal norms. Mention should be made, therefore, of the two most influential explanations with respect to this issue. The two explanations put forth for the origin of law can be referred to as the "value-expression" and the "interest-group" perspectives.⁴

Jerome Hall ably summarizes the "value-expression" position when he states that:

"Criminal law represents a sustained effort to preserve important social values from serious harm and to do so not arbitrarily but in accordance with rational methods directed towards the discovery of just ends."⁵

Essentially, legal norms are here viewed as expressions of societal

values which transcend individual interests. Thus, social order is viewed as the result of agreement among the members of a political community as to how they should go about the business of social life. Legal norms develop in an attempt to preserve the valued aspects of this social order.

On the other hand, those individuals who champion the "interest-group" perspective are not inclined to view order as emanating from the cooperation of group members. Order is conceptualized, rather, as the end product of conflicts-of-interests between individuals and/or groups within a political community. A superordinate-subordinate relationship is established wherein the legal norms protect and enhance the interests, as well as reflect the values of the more powerful - often to the detriment of the less powerful. "Power," "conflict," "coercion," and "domination" are key concepts with respect to this perspective. Political power determines legality. Legal norms are supportive of the interests of a "power elite."⁶

A clear-cut, decisive resolution of this debate is beyond the scope of this thesis. It should be noted, however, that the two approaches (consensual versus coercive) are not as irreconcilable as they might appear at first glance. A partial rapprochement is perhaps conceivable if one considers the foci of both approaches. The "value-expression" theorists are concerned with the general character of a body of laws. On the other hand, the "interest-group" theorists focus on the process by which particular laws are created. As a consequence, the lack of agreement may be due to the levels of generality (i.e., the macro-versus-micro approach) at which the respective orientations are operative.⁷

Both perspectives embody a resort to formal legal sanctions in an attempt to prevent and/or punish violations of legal norms. In other words, the concept of "punishment" - e.g., its justifications - is identical irrespective of the orientation put forth. The ultimate aim is the preservation of the existing social structure, be it consensual or coercive. Keeping this in mind, it is possible to proceed with a consideration of "punishment."

Punishment - Meaning and Justification

The logical basis of the criminal law rests on three concepts: offense, guilt, and punishment. These three key concepts represent the three fundamental problems of substance in the criminal law: a) what conduct should be labelled criminal; b) what determinations must be made before a person can be found to have committed an offense; and c) how should individuals who are found to have committed a criminal offense be dealt with.⁸

The term crime will be employed in the legalistic or juristic sense. That is, a crime will be seen as an "act or omission legally prohibited by the state, which prosecutes and punishes the blameworthy offender."⁹

What is meant by a crime, then, is simply conduct forbidden by law and to which certain consequences called punishment will apply. A crime is not merely legally prohibited conduct; it is proscribed conduct for which punishment is prescribed. As a result, punishment exhibits the following characteristics: (It is)

- "1. a privation (evil, pain, discomfort);
2. coercive;
3. inflicted in the name of the state; 'authorized;'
4. presupposes rules, their violation, and a more or less formal determination of that expressed in a judgment;
5. inflicted upon an offender who has committed a harm and this presupposes a set of values by reference to which both the harm and punishment are ethically significant;
6. extent or type of punishment is in some defended way related to the commission of the harm, and aggravated or mitigated by reference to the personality of the offender, his motives, and temptation."¹⁰

In sum, criminal punishment simply refers to any range of permissible dispositions authorized by law in those instances where persons have been subjected to the processes of the criminal law and subsequently adjudged guilty of criminal behavior.

Many justifications of punishment¹¹ have been brought forth with the passage of time. Four basic justifications are generally accepted as the basis upon which legitimately appointed representatives of a political community should act in imposing penal sanctions upon those who transgress the law. These are: 1) retribution, 2) rehabilitation, 3) incapacitation, and 4) deterrence. These four objectives are by no stretch of the imagination mutually exclusive justifications. In truth, they constantly overlap and thus both limit and enhance their respective operations. Although they may alternate from time to time with respect to dominance, they are all perennially present. None should be overlooked if a better understanding of the nature of punishment is to be grasped. The dilemma of punishment resides in the problems which arise when an attempt is made to integrate all of these aims of punishment into a logical, efficient system of criminal law.

Retribution

The retributive position is indeed an ancient one, and its content has not been greatly transformed over the centuries. Although persistently criticized by the advocates of a "progressive" legal system, it continues to play a vital role in our present-day system of legal norms. The imposition of penalties upon offenders raises a question of moral justification. Retribution or social retaliation provides punishment with a moral bulwark. This moral quality of punishment lies in its intrinsic justice rather than its possible effect in causing or averting pain.¹² Man is viewed as a rational, freely-acting organism who, as a result, is responsible for his behavior. Because man is the "master of his fate," he ought to receive his just deserts. Consequently, it is "right" that the good be rewarded and the wicked be punished. The imperatives flow from the nature of man and thus require no pragmatic justification.¹³ This doctrine takes either of two positions: the revenge theory or that of expiation. With respect to the former, vengeance is historically the oldest reason given for punishment. It is at this point that the interests of the injured party enter the picture. In this instance, however, revenge is demanded for an injury done the state or community. Because the offender has harmed the community, he deserves to suffer. He has, in a sense, upset the delicate balance of social harmony. In order to restore that equilibrium he must be sanctioned. Retribution thus functions as a social "barometer," reflecting the communal need to preserve harmony by prohibiting certain types of conduct defined as destructive. This notion is best symbolized by the portrayal of

justice as a blindfolded goddess with scales in her hand.

Closely linked to the concept of vengeance is the notion of expiation. The religious overtones of retribution surface with this idea of "purging guilt." The transgressor must "pay his debt" to society. This formulation contains the happy consequence that, once the damage is repaired, the slate is wiped clean. The offender becomes a new man in the eyes of the community. This idea should be stressed regardless of the practical considerations which operate to prevent the violator making a fresh start.

Whereas many writers associate retribution with legal conservatism and the irrationality of revenge, its presence can be seen, rather, as valuable to the functioning of criminal sanctions. On the one hand, it presents the thesis that only those persons who have been found "guilty" as a consequence of their passage through the judicial process can ethically be subjected to punishment. On the other hand, the doctrine helps to sustain a proportionate relationship between the offense and the punishment. Let the sanction fit the crime and not the criminal. It thus sets limits to the demands of rehabilitation, deterrence, and incapacitation - limits which reflect public opinion. In short, retribution provides a justification for some punishment and sets limits to the amount of punishment justifiable.

Retribution provides the process of punishment with a moral basis, namely that of justice. Punishment should serve both to express and enhance the horror with which community members ought to regard criminal transgressions. The objectives of incapacitation, deterrence, and reformation may guide in the determination of how

to punish; but the basic issue of the right to punish is, above all, a question of justice, and thus, of retribution. The exaction of retribution encompasses the expiation by the criminal of his crime, and the satisfaction of the demand of members of society for justice.

Rehabilitation

Although rehabilitation may appear the most "humane" purpose of punishment, it is still a goal of punishment so long as its invocation depends upon finding that an offense has been committed, and so long as its object is to prevent the commission of crimes.¹⁴ In this manner it overlaps with retribution. It overlaps with the ideas of incapacitation and deterrence in that all three come under the utilitarian notions of the prevention of crime and the protection of society.

Within the last few years, the rehabilitative ideal has surged upward in influence. It is, all too often, postulated as the only "real" purpose of correctional activity. The rehabilitative ideal involves a complex of ideas. It assumes, initially, that human behavior is the result of antecedent causes in the physical universe. Subsequently, it is believed that these causes can be discovered and described. Knowledge of these causes makes possible an approach to their scientific control. Finally, it is assumed that measures can be employed to alter the criminal's behavior in such a manner as to promote his happiness as well as the welfare of society.¹⁵ The process of reformation is fundamentally an educational one. The violator must, as a result of the application of the sanction, be brought to see the

"error of his ways." This insight should result in a restructuring of the criminal's behavior and value systems. As can be readily appreciated, the boundaries separating rehabilitation from deterrence can easily become blurred.

Unfortunately, practical applications of the ideal have at times resulted in its debasement. For example, the language of therapy has been employed to disguise deplorable conditions in custodial institutions. In some cases, the reformatory focus on the individual criminal rather than the crime has produced increased severity in penal measures. Indeterminate sentences represent but one such example. In toto, the rise of the rehabilitative ideal has often been accompanied by attitudes and actions which conflict with the belief in human autonomy and the values of individual liberty.

In truth, it must be pointed out that the claims put forth by the champions of reformation have not as yet been borne out by research efforts which have attempted to measure their validity.

Incapacitation

The incapacitative function of punishment has received little attention in the literature because the necessity for it seems so obvious. The simplest rationalization for this type of restraint is that for its duration the quarantined individual loses the capacity to commit further crimes. Although it may overlap to quite an extent with the goal of deterrence; it can also be seen as an independent justification capable of standing on its merits. Incapacitation, then, uses the fact that an individual has committed a crime as a basis for

assessing his personality and subsequently making a prediction as to the likelihood of his repeating crimes of that sort. It then becomes an empirical question as to the accuracy of the predictive statement. The social dangerousness of an individual becomes the prime criterion. Incapacitation comes closest to achieving its goal in those areas of proscribed behavior where the individual is least capable of controlling his behavior.

Deterrence

The imposition of penalties for the violation of criminal edicts has traditionally been justified for such reasons as social justice and retribution. Presently, an often-voiced rationalization given for imposing sanctions on law violators is that of deterrence. While the retributive position looks backward at the offense committed, the deterrence doctrine looks forward at the possibility of preventing future violations. The deterrent or utilitarian position maintains as its fundamental premise that punishment is unjustifiable unless it can be demonstrated that more good is likely to result from inflicting pain rather than withholding it. The "good" that is thought to result is the prevention (or at least reduction) of crime and the simultaneous protection of society.

Deterrence, as utilized here, will be defined as: "the preventive effect which actual or threatened punishment of offenders has upon potential offenders."¹⁶ Unfortunately, the complexities inherent in the concept have too often escaped the attention of researchers. As a result, some confusion exists as to both the nature and efficiency of

deterrence. Deterrence has a twofold purpose: individual prevention and general prevention. Individual (special) deterrence represents an attempt to dissuade an offender from repeating criminal acts. As the term is generally employed, it is synonymous with the concept of intimidation. That is, punishment should be of such a nature as to discourage an offender's continued pursuit of a life of crime. It should also be kept in mind that both the processes of incapacitation and reformation operate along the dimension of individual deterrence - the former in a partial manner; the latter with the objective of total deterrence. General prevention, on the other hand, seeks to discourage the potential offender by demonstrating the unenviable consequences of law violation. Thus, general prevention refers to the ability of the criminal law and its enforcement to make citizens law-abiding. The utopian ideal in evidence here is, of course, the eventual eradication of all crime.

General deterrence can be accomplished in a variety of ways.¹⁷ Individuals may be frightened or intimidated into remaining on the "correct" side of the law. In brief, people may be dissuaded from criminal activity because of their fear of punishment. This notion was championed by the founders of the Classical school of criminology; e.g., Jeremy Bentham and Cesare Beccaria. The fundamental concept on which the premise rests is that of "hedonistic calculus." Man is a rational, calculating, pleasure-seeking animal. He exercises freedom of choice; but in such a manner as to opt for pleasurable rather than painful alternatives. Consequently, if man is to be kept lawful, criminal sanctions must be painful enough to outweigh the pleasure

produced by crime. Feuerbach had this in mind when he postulated his theory of punishment as psychological coercion directed against the citizenry.¹⁸ This view is at best an incomplete one. Deterrence does not depend solely on rational calculation, but also on the likelihood and on the regularity of human responses to danger. It further relies on the possibility of conditioning and reinforcing internal human controls.¹⁹ It is regrettable that this oversimplified view of deterrence dominates at the levels of both policy-making and empirical research. It represents an incomplete understanding of the deterrence process. Prevention can also operate in other manners. Prevention should have an educational function as well. Law and punishment should create moral inhibitions against the commission of prohibited activities. Punishment, as an expression of the social disapproval of an act, is believed to help formulate and strengthen the public's moral code and thereby create conscious and unconscious inhibitions against law violation. Humans often do not act rationally. Rather, they perform certain activities and refrain from others without any conscious deliberation. The socialization process results in the division of activities into those which are thinkable and those which are unthinkable.²⁰ Most individuals would no more think of committing certain crimes than they would of jumping off a cliff. These unconscious inhibitions can also be aroused without resorting to moral referents. Purely as a matter of habit, it is possible to induce favorable or unfavorable attitudes toward this or that act. In fact, general deterrence is most effective when a habitual obedience to law is created.²¹

These brief considerations underline the complex nature of the concept of deterrence. Above all, they render suspicious any claims of a simple cause-effect, stimulus-response relationship between legal sanctions and the commission of crime.

Conclusion

It is hoped that the preceding discussion will serve as a satisfactory introduction to the topic of punishment and its justifications. The creation of legal norms is justified by reference to the desired or proposed accomplishment of the objectives of retribution, deterrence, incapacitation and rehabilitation. This thesis will concern itself solely with the goal of deterrence. The issue of deterrence is a fundamental one with respect to the rationale of our legal system. Laws are brought into being with the expectation that the presence of corresponding legal sanctions will discourage potential offenders. Lack of agreement as to the efficacy of deterrence has made the concept a focus of scholarly interest in both the fields of criminology and jurisprudence. The issue with respect to the deterrent power of criminal sanctions, however, is as yet unresolved. One reason why the discussion of deterrence often proves fruitless is that the protagonists generalize too much. If a better understanding of the problem is to be had, it is important that each major group of crimes be considered separately. Both sociological and psychological correlates vary markedly for the different categories of law-violation. One should, therefore, be wary of studies that would all too readily throw thieves, murderers, rapists, traffic violators, and white-collar

criminals together. The effectiveness of criminal sanctions will differ from one type of crime to another. For this reason, this thesis will concern itself solely with the crime of homicide in an attempt to examine the relationship between the incidence of homicide and the use or nonuse of the death penalty. Two other reasons were instrumental in influencing the decision to limit the scope to homicide. Firstly, the major portion (as well as the most reliable) of the empirical work done with respect to deterrence has dealt with the influence of capital punishment on homicide. Secondly, the issue of the feasibility of capital punishment is a topic which presently concerns a substantial number of Canadians.

FOOTNOTES

¹F. James Davis, Henry H. Foster Jr., C. Ray Jeffery, E. Eugene Davis, Society and the Law, The Free Press of Glencoe, U.S.A., 1962, p. 40.

²Ibid., p. 43.

³Ibid., p. 41.

⁴William J. Chambliss, Crime and the Legal Process, McGraw-Hill Book Company, U.S.A., 1969, pp. 7-8. For a somewhat different taxonomic scheme see A. Turk, Criminality and Legal Order, Rand McNally & Company, Chicago, 1969, pp. 30-33.

⁵Jerome Hall, General Principles of Criminal Law, 2nd edition, Indianapolis, 1960, p. 1. Other proponents of this view include H. L. Hart, Law, Liberty, and Morality, Vintage Books, U.S.A., 1963, and Lon Fuller, The Morality of Law, Yale University Press, 1964.

⁶This view of social order and its relationship to law is prominent in the works of Karl Marx, Max Weber, and C. W. Mills among others. It is also a basic assumption of those individuals adhering to the labelling perspective in deviance. See H. S. Becker, The Outsiders, The Free Press, New York, 1963.

⁷For a similar attempt at reconciliation see A. Cohen, Deviance and Control, Prentice-Hall, Inc., U.S.A., pp. 35-6.

⁸Herbert L. Packer, The Limits of the Criminal Sanction, Stanford University Press, California, 1968, p. 17.

⁹Leonard Savitz, Dilemmas in Criminology, McGraw-Hill Book Company, New York, 1967, p. 18.

¹⁰Jerome Hall, op. cit., p. 310.

¹¹Unless otherwise specified, punishment when employed will refer to legal punishment.

¹²Sir Walter Moberly, The Ethics of Punishment, Faber and Faber, London, 1968, p. 69.

¹³The doctrine of retribution is presented by a number of transcendental theories based upon principles supposed to transcend experience. These include the theological view which holds it a religious duty to punish criminals; Kant's theory of moral law; Hegel's view of punishment as a necessary logical complement of injury; and the aesthetic theory of punishment. For a brief discussion of these see Donald R. Taft and Ralph W. England, Jr., Criminology, fourth edition, The Macmillan Company, New York, 1964, p. 291.

¹⁴H. L. Packer, op. cit., p. 54.

¹⁵Francis A. Allen, "Criminal Justice, Legal Values and the Rehabilitative Ideal," in R. Quinney, Crime and Justice in Society, Little, Brown and Company, Boston, 1969, pp. 449-450.

¹⁶John C. Ball, "The Deterrence Concept in Criminology and Law," in Journal of Criminal Law, Criminology, and Police Science, Vol. 46, 1955-56, p. 347.

¹⁷J. Andenaes, "General Prevention - Illusion or Reality?" Journal of Criminal Law, Criminology, and Police Science, Vol. 43, 1952, p. 179.

¹⁸J. Andenaes, op. cit., p. 179.

¹⁹Ernest Van Den Haag, "On Deterrence and the Death Penalty," Journal of Criminal Law, Criminology, and Police Science, Vol. 60, 1969, p. 142.

²⁰Similar ideas have been somewhat expanded upon by Eysenck and Trasler in their theoretical formulations with respect to crime.

²¹Wolf Middelndorf, The Effectiveness of Punishment Especially in Relation to Traffic Offenses, Fred B. Rothman & Co., South Hackensack, New Jersey, 1968, p. 55.

CHAPTER II

CAPITAL PUNISHMENT

"The arguments for and against the death penalty, have been analyzed, dissected, lacerated, mangled, and pulverized, in legislative halls, forums, churches, classrooms, newspapers, journals, and pamphlets, by lawmakers, orators, clergymen, lecturers, journalists, pamphleteers, and schoolboy debaters. It seems that everything that can be done to these arguments by all kinds of people in all kinds of places has already been done; and yet the controversy goes on, now and then bursting into flames as prison riots and heinous crimes deeply shock public opinion and provoke indignant protests and clamorous demands for action. In the face of this, we must conclude that the controversy has many more sides than it appears to have at first glance, and that many who have engaged in it have tended to give simple answers to problems that are very complex."¹

No penological issue has produced more acrimonious debate than that of capital punishment. In spite of the comparative rarity of its application, feelings invariably run high whenever proposals are formulated as to its abolition, or even modification. A veritable host of arguments have been voiced by both those who desire the retention of the death penalty and by those who propose its abolition. A consideration of the principal arguments is essential to the understanding of the question of the desirability and efficacy of this ultimate sanction.

Capital Punishment - Pros & Cons

The following arguments represent the major areas of debate or justifications given for the retention or abolition of the death penalty.

As is the case with many delicate issues, the Bible is utilized by both the retentionists and the abolitionists in an attempt to buttress their respective positions. The retentionists argue that the sanctity of human life cannot be questioned. Consequently, murder cannot be condoned. When the state takes the life of a murderer it does so as God's agent, having received express authority from Him.

On the other hand, those who favor abolition arrive at a diametrically opposed conclusion. They contend that it is morally wrong for the state, as well as the individual to take human life. The punishment is at variance, therefore, both with the principles of Christianity and the humanitarian development of the modern world. Capital punishment represents a barbaric remnant that is out of step with the moral currents of the civilized world.

A resolution of this moral conflict is clearly impossible. It is always a dangerous procedure to quote isolated passages from Scripture. The "Word of God" has been employed in the past to condone both the highest acts of human charity, as well as the most despicable acts of human depravity. It will, no doubt, continue to be so employed.

2. Retribution

A close relative of the foregoing theological issue is the ethical problem of the "justice" of the death penalty. The ideas associated with retribution have been discussed in the previous chapter and will not be restated here. Mention should be made, however, of the abolitionist argument that justice is a relative

concept and its application changes with time. About two hundred years ago, for example, England had over two hundred offenses calling for the death penalty.² Execution was at that time considered just retribution for each of these crimes. Today, for all practical purposes, the sentence of death is rarely employed for crimes other than murder. What was "just" yesterday, may very well not be tomorrow. In addition, the abolitionists point out that the death penalty is based upon a concept of human freedom which the social sciences have shown to be somewhat inaccurate. Man does not enjoy complete freedom. His behavior is affected by a vast number of social forces or factors. If absolute freedom of action is an illusion, then the same can be said of absolute justice. Individual responsibility cannot be evaluated in absolute terms. Atonement and retribution are no more than primitive concepts.

Here again, the argument is unresolvable. It should be noted, however, that the argument for retribution is not strongly supported in practise.³

Both the theological and retributive arguments represent moral and ethical positions which are not subject to resolution. They are unlikely to be abandoned regardless of the results of empirical investigation. There are other arguments, however, which can be more readily defended or weakened by the findings of social science research.

3. Economy

A common argument employed by those individuals favoring

the death sentence holds that execution is an economical method of dealing with capital offenders.⁴ The death penalty is much more economical than life imprisonment. Why should the state be obligated to support a murderer for the rest of his natural life?

Abolitionists, on the other hand, are quick to reply that the death penalty in practise is by no means an economical measure. It is true that the maintenance of capital offenders in prison is an expensive practise. The same can be said, however, of all the other inmates who inhabit various correctional institutions. There is little that can be termed economical in our present system of incarceration. Abolitionists also point to the costs entailed by the difficulty of selecting juries willing to pronounce the death sentence. Prolonged trials and numerous appeals are very expensive. The defendant, fighting for his life, will naturally exhaust every legal channel. As a final rejoinder to the argument of economy, those who oppose capital punishment point to the financial expenses entailed in the construction and maintenance of structures to house those inmates awaiting execution.

4. Unequal Application

One of the strongest points advanced by abolitionists refers to discrimination in the application of this final sanction. The retentionists simply ignore or deny this assertion, but the evidence that is presently available would seem to favor the former. Empirical research in the United States indicates that those individuals most

likely to be executed are disproportionately indigent, poorly educated, unskilled, without counsel or with court-appointed counsel, male and Negro.⁵ In the U.S.A., for example, 55% of the individuals executed since 1930 have been negro males.⁶ This contention appears to be one of the most powerful weapons in the abolitionists' arsenal.

There would appear to be some truth in Bedau's contention that:

"It may be exceedingly difficult for a rich man to enter the Kingdom of Heaven, but case after case bears witness that it is virtually impossible for him to enter the execution chamber."⁷

5. Errors in Justice

Another disadvantage frequently stressed by abolitionists is the irrevocable nature of the death penalty. They cite numerous instances in which innocent individuals have been both condemned to death and executed.⁸ The approval of the death penalty represents an abandonment of any hope of salvaging the lives of capital offenders.

The retentionists answer this charge by arguing that the condemnation of execution of innocent persons is an exceptionally rare phenomenon. It is an unfortunate, but necessary, price to pay for the protection of society and the execution of justice.

With respect to this argument one can only add that the possibility of injustice argues against any kind of punishment only if its expected utility is less important than the possible harm (to innocents) as well as the possible inequities. The notion of injustice argues against the death penalty only inasmuch as the added usefulness (deterrence) expected is seen as less important than the added harm.⁹

6. Administration of Justice

Those who favor the death penalty view it as an exceptional method of "seeing justice done." Many individuals who oppose the imposition of death argue quite the contrary. The death sentence, they contend, may hinder the efficient administration of justice. Claims have been made that the possibility of the death penalty results in more acquittals. Unfortunately, convincing data with respect to this contention are not available. It could very well be that factors such as the emotional reaction to capital offenses, the prejudices of the jurors, and public hostility, separately or collectively, produce a greater number of convictions. Their exact influence, however, is anyone's guess. It has also been argued that in those cases where juries can exercise discretion, a greater proportion of convictions for noncapital rather than capital homicides is the result.¹⁰ In a similar vein, abolitionists (in the U.S.A.) maintain that the presence of the death penalty does little to insure a fair trial in that those prospective jurors opposed to the application of capital punishment are systematically excluded from jury duty.¹¹ The result is "death-qualified" juries. In light of the preceding assertions, it is plausible to suspect that the death penalty might distort the course of the criminal law.¹²

7. Protection of Society

As a last resort, the retentionists maintain that executions will at least assure the citizenry of a community that those "monsters" will never again be free to roam the streets and perpetrate other

atrocities. In any event, they add, the death penalty is required in order to insure the safety of both police officers and prison personnel while they carry out their appointed tasks. The abolitionists retaliate by citing statistical evidence that would seem to indicate that paroled capital offenders, e.g., murderers, have the lowest parole violation and recidivism rates. Only in exceptionally rare instances do paroled murderers ever kill again.¹³

With respect to police safety, the contention offered by retentionists is that the possibility of execution deters criminals from carrying lethal weapons when they engage in criminal activities, and from using them against police officers when they are confronted by arrest. The available evidence is inconclusive with reference to police safety.¹⁴ In order to properly answer the aforementioned contention, certain data are required. One would need to know if criminals carry more lethal weapons in areas where the death penalty has been abolished, and if they use them more often. Such data would be difficult to gather. Keeping this in mind, one then has to rely upon data on the number of police killed or wounded. One encounters practical difficulties at this point in that the police often keep poor records with respect to this matter. In addition, police cooperation may be difficult to obtain. Given these considerations, it is impossible to conclude that the abolition of the death penalty has been the policeman's lot more or less hazardous.

It is often heard that the death penalty is required to protect the lives of inmates and staff in correctional institutions. As is the case with police safety, the evidence with respect to

this assertion is also inconclusive.¹⁵ It should be noted, however, that incarcerated murderers commit prison homicides and assaults very infrequently.¹⁶

Although the aforementioned arguments are frequently voiced whenever the issue of capital punishment is debated; the most widely used argument around which the dilemma of the death penalty revolves is that of deterrence.¹⁷ The retentionists view death as a unique deterrent. Because life is man's most precious possession, the threat of death is held logically to be the most effective deterrent. The fact that the threat of capital punishment has failed as a deterrent when a murder has been committed is not accepted as proof that others may not have been dissuaded from homicide. It is reasonable to believe that the deterrent force of the death sentence affects not only the conscious thought of those individuals tempted to commit murder, but also creates in the community or state, over an extended period of time, a profound feeling of horror with respect to murder. On the other hand, the abolitionists vehemently argue that the threat of capital punishment has failed to deter individuals who would commit murder. In fact, the morbid curiosity or sensationalism attached to both homicides and executions may have prompted certain individuals to commit the act.

It is interesting to note that the defenders of the death penalty often talk as if the burden of proof with respect to deterrence were not on them. In fact, they talk as though our long history of putting capital offenders to death was a sufficient justification for continuing the practise.¹⁸ When confronted with the

statistical ammunition accumulated by those who oppose capital punishment, they contend that: a) the statistics are unreliable, b) that the meaning of such statistics as have been collected is unclear, and that c) the biases of those who favor abolition have coloured their interpretation of the data. In other words, they maintain that while figures may not lie; liars figure.

A consideration of the deterrent power of the death penalty is essential to the resolution of the issue of capital punishment. More specifically, an examination of the empirical research thus far accomplished should be undertaken in order to arrive at some understanding of the relationship between the death penalty and deterrence.

Deterrence - An Examination

There is one question which must be answered: Is the death penalty an effective deterrent? More accurately, perhaps, how many capital crimes, if any, have been (or might be) prevented by the threat of execution, which would not have been (or would not be) prevented by the threat of long term imprisonment?¹⁹ Can the statistical material now available assist us in formulating an answer to this question?²⁰

Various methods have been employed in an attempt to gauge the deterrent efficacy of capital punishment. Upon careful consideration, however, these studies can be found to suffer from two principal weaknesses: a) inadequate theory, and/or b) methodological inadequacies.

With respect to the theoretical insufficiencies, the majority of the studies that have been accomplished have utilized a rather

crude conceptualization of deterrence. A simple cause-effect relationship between deterrence and the death penalty has been assumed. Deterrence was seen as a rather straightforward form of psychological coercion. Men refrained from murder because they feared execution. Such an oversimplified notion of deterrence (as popular as it may be) is only partly true. Deterrence may also operate in an educational manner. It can help create and reinforce inhibitions (conscious and unconscious) against criminal behavior. It may also induce law-abiding behavior in a purely habitual sense. There are many paths, therefore, along which deterrence can proceed.

The methodological problems involved in the work done on the deterrent power of the death penalty are especially troublesome. The most common method employed has been the comparison of countries or states that have abolished the death penalty with other countries or states that have retained it. Such comparisons are, by and large, of little value. The units of comparison are often too heterogeneous. There are too many variables which are dissimilar, and thereby uncontrolled. In order for such comparisons to be viable, extralegal variables such as population composition and socio-cultural differences would have to be controlled to produce identical units of comparison.

Attempts have been made to rectify this problem (in the U.S.A.) through the comparison of homicide rates in contiguous areas, some with the death penalty and some without. The assumption made is that those areas will be similar enough to permit accurate inference as to the force of deterrence. Thorsten Sellin, for example, found similar trends in the homicide rates for contiguous states.

Within each group of states, he found it impossible to identify, to separate, the trends of the abolitionist states from those of the retentionists areas.²¹ Other efforts have been produced largely similar results.²² Such efforts, however, suffer from serious weaknesses. Firstly, the contiguous areas, although more similar than noncontiguous areas, are still not similar enough. There remain significant differences in population composition (age, sex, ethnicity), social structure, and culture pattern which might contaminate and distort the deterrent power, if any, of the death penalty. Secondly, there arises the question of the difference between "having a law" and using it. While many areas may retain the death penalty, its actual implementation may be so infrequent as to render its deterrent power nonexistent. Finally, these statistical studies rely on inferences from homicide rates to capital murder rates.²³ Given the concept of deterrence employed, the deterrent efficacy of capital punishment should be manifest only for those cases of capitally punishable murder. As a result of data-recording procedures, the researchers have had to rely upon general homicide statistics which include not only capital murders, but noncapital homicides as well (including justifiable and excusable homicides). Consequently, it becomes necessary to assume that the ratio of capitally punishable homicides to all types of homicide remains constant over time. Whether the ratio of the two is sufficiently constant to permit inference is debatable.²⁴ The problems mentioned above combine to render questionable the conclusions drawn from studies employing contiguous comparisons.

Another method for testing the deterrent effect of the death penalty is the comparison of the incidence of capital crimes at varying intervals after a known imposition of the penalty. Presumably the deterrent value of the death penalty is greater for an execution, than for the simple threat of its imposition. Dann studied the homicide rates sixty days prior to and sixty days subsequent to five executions in Philadelphia.²⁵ In another study in Philadelphia, Savitz analyzed the rate of capital crimes for a period of eight weeks immediately before and eight weeks immediately following four executions.²⁶ The hypothesis in each study was that the deterrent effect would be greatest in the locality where the crimes were committed and in the time periods immediately following the executions. In each of the studies, no significant increase or decrease in homicide rates was noted. This should not be taken as an indication of the failure of deterrence; but rather as inconclusive evidence as to the deterrent effect. It is quite possible that the time periods utilized were too short and/or that the homicide incidence was not substantial enough to note any real effect that the executions may have had.

A final method in testing the deterrent force of the death penalty involves the comparison of rates of capital crimes in an area before and after the abolition (and in some cases the abolition and reintroduction) of capital punishment. This strategy permits the assumption that the extralegal factors have not changed substantially. A number of studies have been completed utilizing this approach. To cite one example, Hayner and Cranor studied the

effects of the death penalty in Washington. The penalty was repealed in 1913 and reintroduced in 1919. The available records indicate that there was an increase in the number of capital crimes committed during that period. The higher rate continued, however, after the restoration of the death penalty.²⁷ No relationship could thus be established between the death penalty and deterrence. The general conclusion produced by such studies is that abolition has not been associated with unusual increases in homicide rates. In fact, restoration of the death penalty was most often a form of "panic legislation" enacted on the heels of the commission of a few atrocious crimes which aroused public sentiment.²⁸

A number of problems arise to mar the conclusions of these studies, however. The presence and imposition of the death penalty may have been successful in creating and reinforcing in a community a profound feeling of revulsion with respect to murder. As a result, certain norms which proscribe murder-risk behavior may have become operative in the community. If these norms have been internalized by community members, the abolition of executions may not immediately terminate the influence of the norms. It may be generations, in fact, before the effect of abolition becomes reflected in the behavior of community members.

Another point worth considering is that it is quite consistent with the postulated deterrent effect of the death sentence that there be less homicide after abolition. With retention, it is argued, there might have been still less.²⁹ Let us suppose, for example, that the annual homicide rate in Canada fell during

the 1960's from 8.0 to 4.0 per 100,000 population. If the death penalty had been abolished in 1960 and the abolition was followed each year thereafter by ten or so more murders than would have occurred had the death penalty been retained; the general homicide rate would still have decreased almost exactly as had been hypothesized. Thus, while the general homicide rate decreased during that period, abolition was, in fact, followed by an increase in the total number of murders; and this despite an almost constant ratio of total homicides to murders.³⁰

Unless the increase in homicide incidence were sizeable, the contribution of the abolition of the death penalty would not be reflected in the general homicide trend. The general pattern observed would, therefore, be misleading. Given these considerations, the findings of such studies remain open to question.

Conclusion

What can be said, therefore, about the relationship between the deterrence of murder and the death penalty? The empirical studies undertaken thus far demonstrate only that there is no statistical proof of the deterrent effect of the ultimate sanction. They do not show that there is no deterrent effect. An inability to show the presence of an effect is not identical with the demonstration of the absence of an effect. One must conclude, therefore, that the evidence with respect to the relationship between deterrence and capital punishment is, as yet, inconclusive.

The expenditures of considerable amounts of time and money have failed to resolve the issue of capital punishment. If ever

an answer to that question is to be achieved, it is essential that a consideration be undertaken of the evidential requirements with respect to deterrence. In other words, what would one need to know in order to determine the deterrent force, if any, of capital punishment? What difficulties would have to be overcome in order to isolate the relationship between these two variables? An attempt to formulate a satisfactory answer to that difficult question will be made.

FOOTNOTES

¹Robert C. Caldwell, "Why is the Death Penalty Retained?," in Thorsten Sellin, ed., "Murder and the Penalty of Death," The Annals of the American Academy of Political and Social Sciences, Vol. 284, 1952, p. 45.

²Walter C. Reckless, "The Use of the Death Penalty, A Factual Statement," in Crime and Delinquency, Vol. 15, No.1 1969, p. 43.

³If retributive arguments were strongly supported, executions would include the torture of the criminal as well as wide publicity. In practise, however, executions are privately held and an attempt is made to render them as swift and painless as possible. See A. Camus, "Reflections on the Guillotine," in Resistance, Rebellion and Death, translated by Justin O'Brien, Alfred A. Knopf, New York, 1966, p. 178.

⁴E.H. Sutherland & D. Cressey, Criminology, 8th ed., J.B. Lippincott Company, New York, 1970, p. 330.

⁵J. Greenberg & J. Himmelstein, "Varieties of Attack on the Death Penalty," Crime and Delinquency, Vol. 15, 1969, p. 114. See also Marvin E. Wolfgang, Arlene Kelly, and Hans C. Nolde, "Comparison of the Executed and the Commuted Among Admissions to Death Row," in R. Quinney, Crime and Justice in Society, Little, Brown and Company, Boston, 1969, p. 516.

⁶J. Greenber & J. Himmelstein, *ibid.*, p. 114.

⁷Hugo A. Bedau, The Death Penalty in America, Anchor Books, New York, 1967, p. 188.

⁸Otto Pollak, "Errors in Justice," in Thorsten Sellin, ed., Capital punishment, Harper & Row, New York, 1967, pp. 207-220. See also Edwin M. Borchard, Convicting the Innocent, Yale University Press, New Haven, 1932.

⁹Ernest Van Den Haag, "On Deterrence and the Death Penalty," Journal of Criminal Law, Criminology and Police Science, Vol. 60, 1969, p. 142.

¹⁰Herbert B. Ehrmann, "The Death Penalty and the Administration of Justice," in Thorsten Sellin, ed., Capital Punishment, Harper & Row, New York, 1967, p. 196.

¹¹Walter E. Oberer, "The Death Penalty and Fair Trial," in Thorsten Sellin, ed., *ibid.*, p. 220.

¹²"Indeed, the one conclusion on which practically all criminologists agree is that the death penalty tends to distort the course of the criminal law." Herbert B. Ehrmann, *op. cit.*, p. 205.

¹³John M. Stanton, "Murderers on Parole," Crime and Delinquency, Vol. 15, 1969, p. 149. See also G.I. Giardini & R.G. Farrow, "The Paroling of Capital Offenders," in Thorsten Sellin, ed., "Murder and the Penalty of Death," The Annals, 1952, pp. 85-94.

¹⁴Thorsten Sellin, "The Death Penalty and Police Safety," Capital Punishment, Harper & Row, New York, 1967, p. 147. See also Donald R. Campion, "Does the Death Penalty Protest State Police?" in H. Bedau, The Death Penalty in America, Anchor Books, New York, 1967, p. 314.

¹⁵Thorsten Sellin, "Prison Homicides," *op. cit.*, p. 159.

¹⁶Dogan K. Akman, "Homicides and Assaults in Canadian Prisons," in Thorsten Sellin, ed., *ibid.*, p. 166.

¹⁷Among the utilitarian arguments there is no doubt that most widely used is the argument that the death penalty is a social necessity because it effectively deters people from committing murder." Guy Favreau, Capital Punishment Material Relating to its Purpose and Value, Queen's Printer, Ottawa, 1956, p. 88.

¹⁸H. Bedau, The Death Penalty in America, Anchor Books, New York, 1967, p. 214.

¹⁹H. Bedau, *ibid.*, p. 261.

²⁰There exists a large amount of nonstatistical material - pro and con - with respect to the deterrent force of the death penalty. Many of the assertions made in these papers, however, rest upon the statistical evidence that has been brought forth.

²¹Thorsten Sellin, "Homicides in Retentionist and Abolitionist States," Capital Punishment, Harper & Row, New York, 1967, p. 138.

²²Karl F. Schuessler, "The Deterrent Influence of the Death Penalty," in William J. Chambliss, Crime and the Legal Process, McGraw-Hill Book Company, U.S.A., 1969, pp. 378-388.

²³H. Bedau, op. cit., p. 265.

²⁴Sutherland argues that it is. He offers no evidence, however, but rather mentions it as a plausible assumption. See E.H. Sutherland, "Murder and the Death Penalty," Journal of Criminal Law, Criminology and Police Science, 1925, p. 523. Schuessler offers the evidence that the homicide rate corresponds to murder figures given in four independent U.S. crime statistics publications. He argues subsequently that a constant ratio assumption is plausible. See Karl F. Schuessler, op. cit., p. 380.

²⁵Robert H. Dann, "The Deterrent Effect of Capital Punishment," Friends' Social Service Bulletin, Bulletin No. 29, 1935.

²⁶Leonard D. Savitz, "A Study of Capital Punishment," Journal of Criminal Law Criminology and Police Science, Vol. 49, 1958, pp. 338-341. In a similar vein, see Max Grunhut, "Murder and the Death Penalty in England," in Thorsten Sellin, ed., "Murder and the Penalty of Death," The Annals, Vol. 284, 1952, p. 164.

²⁷Norman S. Hayner & John R. Cranor, "The Death Penalty in Washington State," in Thorsten Sellin, ed., *ibid.* p. 103. See also C. Koeninger, "Capital Punishment in Texas, 1924-1968," Crime and Delinquency, Vol. 15, 1969, pp. 132-141. See also, Thorsten Sellin, "Experiments with Abolition," Capital Punishment, Harper & Row, New York, 1967, pp. 122-124.

²⁸Ellen Elizabeth Guillot, "Abolition and Restoration of the Death Penalty in Missouri," pp. 105-109; and Robert H. Dann, "Capital Punishment in Oregon," pp. 110-114, in Thorsten Sellen, ed., "Murder and the Penalty of Death," op. cit., 1952. See also G.W. Samuelson, "Why was Capital Punishment Restored in Delaware?" Journal of Criminal Law, Criminology and Police Science, Vol. 60, 1969, pp. 148-151.

²⁹Ernest Van Den Haag, "On Deterrence and the Death Penalty," Journal of Criminal Law, Criminology and Police Science, Vol. 60, 1969, p. 146.

³⁰For a similar example, see H. Bedau, The Death Penalty in America, Anchor Books, New York, 1967, p. 266.

CHAPTER III

TESTING THE DETERRENT THEORY OF CAPITAL PUNISHMENT

A "legal impact" study entails an attempt to determine the manner in which a particular law (or the prescribed sanction accompanying the law) affects the conduct and attitudes of those individuals and groups residing in the political units where the law is in force.¹ The studies undertaken with respect to capital punishment have attempted to delineate the deterrent force of its actual or threatened imposition. Attempts have been made to assess the deterrent capabilities of the threat of execution by the utilization of a number of methods or research designs. These methods include: a) the comparison of geographical areas that have abolished the death penalty with other areas (contiguous or noncontiguous) that have retained it; b) the comparison of the incidence of capital crimes at varying intervals after a known imposition of the penalty; and c) the comparison of rates of capital crimes in an area before and after the abolition of capital punishment. The evidence gathered thus far with respect to the deterrent power of the ultimate sanction can best be described as inconclusive. Theoretical and methodological inadequacies have prevented the formulation of a satisfactory answer. The question remains as unresolved as it ever was despite considerable expenditures of time, money, and energy.

In view of the present situation with respect to the issue of capital punishment, and in an attempt to clarify the task at hand, a consideration of the evidential requirements with respect to deterrence is in order. An attempt must be made to specify what one would need to know in order to infer a causal relationship between deterrence and the presence of the death penalty. In other words, what are the problems, the obstacles, that an investigator would be forced to confront in attempting to ascertain empirically such a relationship? What hypotheses are required? What procedures can be employed for testing such hypotheses? What types of data do these procedures require? The subsequent chapters will attempt to formulate answers to these questions.²

Hypotheses

The key notion with respect to deterrence is prevention by threat of punishment. Punishment acts as a deterrent for a given individual with respect to a given crime if and only if the individual refrains from the commission of the crime because of his belief that he runs some risk of punishment if he commits the offense and he prefers, ceteris paribus, not to suffer punishment.³ The deterrence theory of capital punishment maintains that the presence of the death penalty and, thus, its threatened imposition are responsible (at least in part) for the dissuasion of potential homicide offenders. The problem, therefore, is one of isolating and assessing the deterrent influence, if any, of capital punishment. The task to be undertaken is one of testing hypotheses about a causal relationship between the presence of the

death penalty and the incidence of culpable homicide. A hypothesis of causal relationship asserts that a particular characteristic or event is one of the factors that determines another characteristic or event.⁴ Any study designed to test such a hypothesis must provide data from which one can legitimately infer that variable A does or does not contribute to the determination of variable B.

With respect to the question of the deterrent theory of capital punishment, the hypothesis of interest⁵ is:

The death penalty deters individuals from the commission of culpable homicide.

The null hypothesis maintains that:

The death penalty does not deter individuals from the commission of culpable homicide.⁶

The precise wording of the hypotheses will vary with the procedure employed in testing them. If time series analysis is utilized one would hypothesize that:

The abolition of the death penalty will produce an increase in the incidence of culpable homicide.

If cross-sectional analysis is utilized, one would hypothesize that:

Areas with the death penalty will have lower rates of criminal homicide than areas without the death penalty.

Bases for Inference

In sociological research, it is impossible to demonstrate directly that one variable wholly or partially determines another. Rather, one must infer from observed data that the causal hypothesis

is or is not tenable with some specified degree of confidence. In order to justify such inferences, a number of requirements must be satisfied. These are: correlation, causal order, and the control of other possible causal factors.

Correlation

One requirement concerns correlation - that is, the extent to which the independent and dependent variables occur together or vary together in the direction predicted by the hypothesis. In order to reject the null hypothesis⁷ with respect to capital punishment, an inverse relationship should be ascertained between the incidence of criminal homicide and the frequency of imposition of the death penalty. The rate of homicide should be significantly higher in an area after the abolition of the death penalty. Areas with the death penalty should possess rates of criminal homicide which are significantly lower than those in areas without the death sentence.

Causal Order

A variable is not ordinarily called the cause of another if it occurs after the second variable. The occurrence of the causal factor must precede or occur simultaneously with that of the effect. According to the deterrence theory, an increase in the incidence of culpable homicide, therefore, should follow a decrease in the use of executions. Abolition of the death penalty must be followed by an increase in the homicide rate. An important consideration, however, is that of the reaction lag. That is, how soon will this increase in homicide incidence begin to take effect? This will depend upon a

number of factors. If fear of the death penalty were the only factor, one could theoretically expect a rise in homicides within a relatively short period of time. The time lag would be influenced by the rate of the public's becoming aware of the abolition of capital punishment. However, one must also consider the interaction between the presence of the death penalty and various ethical and religious proscriptions. Even with the removal of the death penalty, the latter will remain influential. One should consequently expect a relatively longer time lapse (in terms of years) between the abolition of the death penalty and the first noticeable reaction effects. Given this reaction, the use of a longitudinal study may prove more beneficial in assessing the effects of the change in the use of the death penalty.

Control of Other Possible Causal Factors

A crucial requirement in the testing of a causal hypothesis is the elimination of plausible rival hypotheses. A plausible rival hypothesis is a nonexperimental variable which could logically account for the variation in the dependent variable. The control of such non-experimental variables is essential to the validity of inference. In order to tentatively conclude that a change in the imposition of the death penalty contributes to a change (in the predicted direction) of the incidence of criminal homicide, the investigator must be able to take into account all of the possible extralegal variables which could also contribute to the variation in the homicide rate. It is on the basis of this criterion that genuine relationships are differentiated from spurious ones. The assurance provided by a test of significance

will be misleading unless the plausible effects of extralegal variables can be eliminated. The power or strength of a research design is determined largely by its ability to remove other possible explanatory factors. This ability should aid the researcher, at least in principle, in selecting a research design.

Procedures for Testing Hypotheses

The task of theory-testing is principally one of rejecting inadequate hypotheses. The fewer the plausible rival hypotheses which are unaccounted for, the greater the degree of "confirmation" of a theory.⁸ The deterrent theory of capital punishment can be confirmed to the extent that plausible extralegal explanatory variables can be discredited. Consequently, the testing procedure to be employed is preferably that one which best comes to grips with possible causal factors. Campbell and Stanley⁹ present eight factors which they consider to be threats to the validity of research designs in that these variables provide possible sources of rival hypotheses. They are: history, maturation, testing, instrumentation, statistical regression, selection, mortality, and the interaction of factors such as selection and maturation, etc.¹⁰ Because of the quasi-experimental nature of the deterrent influence study, some of these threats may be disregarded, while others will pose special problems. Testing and mortality effects should be non-existent. Instrumentation effects will pose a threat only if the investigator relies upon secondary data sources. There are three major threats to the validity of the study: history; the problem of distinguishing the law as it appears on the books from

the "law in fact"; and the problem of isolating the effect of the death penalty per se.

The Application of the Law

One of the major problems which confronts research with respect to legal impact is that of distinguishing the law as it appears in the statute books from the law "in action." The determination of what the law is in fact must be an initial step in the conduct of any such research. The law as it appears in the criminal code may bear little resemblance to the law as it is interpreted and administered by various legal representatives. The normative-actual discrepancy with reference to the utilization of a legal sanction can prove essential to a correct interpretation of the effectiveness of that particular form of punishment. This issue has often been ignored by researchers who have attempted to study capital punishment. The retention of the death penalty has been equated with its employment. It is a well-documented fact that with respect to murder, the trend (in Canada and the U.S.A.) indicates a steady decrease in the imposition of capital punishment. In the United States, for example, it has been demonstrated that while the states retaining the death penalty may be willing to continue the imposition of death sentences; they are increasingly unwilling to carry out these sentences.¹¹ Many areas, therefore, which retain the death penalty employ it only rarely or not at all. In Canada, for example, there has not been an execution since 1962 although capital punishment was not modified (for a trial period of five years) until 1967. Many studies which have been carried out, consequently, have involved com-

parisons between homicide rates in jurisdictions that allow a death penalty with those that do not allow capital punishment - without attention being paid to the actual frequency of execution in the former jurisdictions. It has been assumed that the deterrent effect of the death penalty is not significantly weakened by its infrequent imposition.

Other problems are created by the existence of this discretion between what the law allows and its implementation. The utilization of the date of the "official" abolition of the death penalty in empirical research may prove misleading if the ultimate sanction has not been imposed for a number of years prior to its "official" discontinuation. Again, it may very well be that the death penalty becomes ineffective as a deterrent when the number of executions drops below a required minimum. What that minimum might be, however, is anybody's guess. The establishment of a date at which abolition becomes "official" may reflect no more than the results of political expediency. The utilization of such a date (e.g., in cross-sectional studies) may prove misleading if studies are carried out without knowledge as to the state of affairs with respect to the actual use of the death penalty prior to abolition.

The Influence of the Death Penalty Per Se

The classic argument given for the retention of the death penalty is that its imposition will dissuade would-be offenders. The crucial problem thus arises of isolating the influence of the death penalty per se. There are without a doubt a number of factors which operate to restrain citizens from engaging in law-violating behavior.

The system of legal norms and their prescribed sanctions represents only one such restraining mechanism. Theological and ethical beliefs and proscriptions, as well as the fear of social disapprobation, are generally assumed to contribute significantly to the prevention of many forms of deviant behavior. Any research design attempting to deal with the impact of a particular sanction on the incidence of a specific behavior will have to make certain that the law is indeed more than an expression of the popular will of the people and that the individuals would be acting differently if the sanction (and the law which prescribes it) were not present.¹² There exists in Canada, for example, a law prohibiting the commission of incestuous acts. Would the removal of penalties with respect to incest result in an appreciable increase in the incidence of incestuous behavior? It is quite reasonable to suspect that the increase, if any, would be insignificant. Moral and religious prohibitions, as well as the fear of social disapproval, would still remain influential in limiting that type of deviant behavior. In a similar manner, would the abolition of capital punishment produce a significant change in the homicide rate? It would be plausible to maintain that this would not be the case. The moral and ethical beliefs opposed to the taking of human life, and the strong social condemnation that such acts would engender, could both presumably militate against any significant increase in the homicide rate following abolition. It is quite possible that:

"In the last analysis, the reason why the average man does not commit murder....., is not because he fears capital punishment - it is simply that to do such a deed is utterly repellent and outrages his moral feelings."¹³

The task, therefore, of disentangling the effect of the death penalty from that of sundry other factors represents an extremely complex problem. None of the studies completed thus far has been able to cope with this obstacle. In order to study the deterrent effect of capital punishment, therefore, it must be assumed that, however, much other factors affect the deterrence of homicide, there is a non-negligible proportion which is affected by the presence of the death penalty.

The two abovementioned obstacles to the drawing of valid inferences from tested hypotheses are common to all types of research designs concerned with legal impact. In addition, each specific research design must come to grips with other sources of plausible rival hypotheses. Their ability to do so determines the desirability of their utilization. What procedures, therefore, could be employed to measure the deterrent efficacy of the penalty of death? Which would theoretically be most effective?

1. The One-Shot Case Study

This procedure involves the single observation of a unit after the introduction of a variable supposed to cause change. With respect to capital punishment, this design would involve the examination of the homicide incidence of a political-geographical area subsequent to the abolition of the death penalty. Such a study would have little more than descriptive value. It could not, by itself, provide a basis for testing generalizations. It would be subject to all of the possible rival hypotheses and unable to control for any of them. Little could

be said with any degree of certainty with respect to the effect of abolition. Even if the investigator knew that the death penalty had been abolished and that a high homicide rate existed in the area, he would have no way of knowing whether and to what extent the former was responsible for the latter.

2. One-Group Pretest Posttest Design

This procedure involves an observation of the behavior which a law (or its sanction) supposedly regulates both before and after a change in the law.¹⁴ With respect to the death penalty, the study would take the form of the examination of homicide statistics collected at two points in time (before and after the abolition of the death penalty). Unfortunately, this design is relatively weak in its ability to control for rival hypotheses. Its first weakness lies in controlling for independent historical factors. For example, a drop in the incidence of homicide subsequent to abolition could simply be the result of improved ambulance service or recent medical discoveries. A rise in homicide occurrence might be caused by a rash of gangland slayings or by an outbreak of political extremism. The before-after study, itself, cannot control for the possible influence of these factors. The likelihood of independent historical variables operating as causal factors increases as the time interval between the before and after measurements increases.¹⁵

The use of statistics examined at only two points in time can be extremely misleading. The investigator must assume that the points in time selected are representative of the other possible

selections. As this is often not the case, this type of design is susceptible to the problems of statistical regression.¹⁶ Regression refers to a statistical probability that extreme events will appear less extreme upon remeasurement. With respect to the abolition of the death penalty, its abolition may have followed upon the heels of a period of extremely low homicide incidence. If the effect of abolition were measured using the year before and the year after abolition; a rise in homicide occurrence might be observed. This increase could have been produced by the removal of the threat of execution. However, the increase could simply be the product of statistical regression. The possibility of regression artifacts constitutes a major reason why the before-after study should be avoided whenever possible.

3. Static-Group Comparison

This research design constitutes a considerable improvement over the two procedures previously mentioned. This design would involve a comparison of an area(s) having abolished the death penalty with another area(s) retaining the threat of execution. The design does have certain weaknesses, however. If the abolitionist area gave evidence of a higher criminal homicide rate than that of a retentionist area, no causal inference could be made with certainty until all the other factors which the areas did not share and which could have affected the homicide rate had been accounted for. Although this requirement presents difficulties, they are by no means insurmountable. The lack of a pretest measurement, however, presents a serious threat to the validity of the inferences drawn from the design.

It is quite possible that the two areas differed with respect to homicide incidence before the abolition of the death sentence.

4. Time Series Design

The investigator employing this design would measure the incidence of criminal homicides at a number of points in time both before and after the abolition of the death penalty. If the curve drawn from these observations showed a "significant" change in the predicted direction following the formal elimination of the threat of execution, it could then be inferred that the observed change was produced by the removal of the death sentence. This design has a number of advantages in that it can control both for maturation and regression. It has one drawback however, - the lack of a control population. This weakness prevents this procedure from controlling (as is the case in design 2) for the possible influence of independent historical variables. The observed increase or decrease in homicide rates subsequent to abolition, therefore, could have been affected by extralegal historical variables such as changes in population composition, and socio-cultural factors conducive to high homicide-risk behavior. These, rather than the change in law, might be the principal explanatory variables.

5. Nonequivalent Control Group Design

This procedure entails a pretest and posttest measurement from both the experimental and control populations.¹⁷ The problems created by the lack of a pretest measurement (in design 3) can thus be avoided. Design 5 will allow the investigator to compare retentionist and abolitionist areas both before and after the elimination of the

threat of execution. This type of design can control for the possible influence of historical factors. However, as the measurements are confined to arbitrary points in time, the study may be confounded by trends which are disguised in the single pretest, single posttest approach. Regression artifacts can similarly confound the results of the study.

6. Multiple Time Series Design

As can be seen from the brief consideration given the previous research designs, each procedure employed to test a causal hypothesis must confront a number of serious obstacles. Those procedures which follow time series analysis (2 and 4) cannot control for the possible influence of historical variables. Cross-sectional studies, on the other hand, cannot control for regression effects. A solution to these weaknesses lies in the combination of both approaches. A multiple time series design allows for such a combination. This procedure compares an experimental and a control group over a number of points in time both before and after the introduction of the experimental variable. An investigator, therefore, could compare retentionist and abolitionist areas over a number of points in time (months, years) both before and after the removal of the death penalty. Consequently, this procedure would control all sources of possible rival hypotheses. It would thus be the most effective procedure that a researcher could use in testing the deterrent theory of capital punishment. However, the viability of such a study depends upon the ability to secure populations similar enough to permit reliable comparison. If this is not possible, another method should be employed.

FOOTNOTES

¹Richard Lempert, "Strategies of Research Design in Legal Impact Study," Law and Society Review, 1966-67, p. 111.

²In some countries and states the death penalty may be applied for crimes other than murder. In some areas, executions can be carried out for crimes such as rape, treason, or kidnapping. The debate surrounding the feasibility of capital punishment, however, concerns itself almost exclusively with homicide. This discussion, therefore, will restrict itself to an examination of the deterrent power of the death penalty vis-a-vis homicide.

³Hugo Adam Bedau, "Deterrence and the Death Penalty: A Reconsideration," Journal of Criminal Law, Criminology and Police Science, Vol. 61, 1970, p. 540.

⁴Claire Selltitz, Marie Jahoda, Morton Deutsch, Stuart W. Cook, Research Methods in Social Relations, Revised Edition, Holt, Rinehart and Winston, New York, 1959, p. 80.

⁵Robert S. Weiss, Statistics in Social Research An Introduction, John Wiley & Sons, Inc., New York, 1968, p. 245.

⁶The issue of the abolition or retention of the death penalty has been fought over the "superior" deterrent force of the death penalty as compared to that of life imprisonment. Most abolitionists are reconciled to a punitive alternative of life imprisonment. More specifically, therefore, the hypothesis could maintain that: the death penalty is a superior deterrent to "life" imprisonment.

⁷The "null hypothesis" often employed for convenience in stating the hypothesis of an experiment or study can never be "accepted" in the strict sense of the term. It can only be "rejected" or "fail to be rejected."

⁸Technically, one can never confirm a theory. One can only disconfirm or fail to disconfirm.

⁹Donald T. Campbell and Julian C. Stanley, Experimental and Quasi-Experimental Designs for Research, Rand McNally & Company, Chicago, 1963, p. 5.

¹⁰History - refers to the specific events (other than change in the independent variable) occurring between the initial and subsequent measurements. Campbell & Stanley, Ibid.

Maturation - "Processes within the respondents operating as a function of passage of time per se." Ibid.

Testing - "The effects of taking a test upon the scores of the second testing." Ibid.

Instrumentation - "Changes in the calibration of a measuring instrument or changes in the observers or scorers used may produce changes in the obtained measurements." Ibid.

Regression - "(Operates) where groups have been selected on the basis of their extreme scores," Ibid.

Selection - "Biases resulting in differential selection of respondents for the comparison group." Ibid.

Mortality - "Differential loss of respondents from the comparison groups." Ibid.

Interaction - "(The danger arises) in certain of the multi-group quasi-experimental designs..., (that) such an interaction effect might be mistaken for the effect of the experimental variable." Ibid.

¹¹Thorsten Sellin, "Executions in the United States," Capital Punishment, Harper & Row, New York, 1967, p. 35.

¹²Richard Lempert, "Strategies of Research Design in the Legal Impact Study," Law and Society Review, 1966-67, p. 120.

¹³Gerald Gardiner, "The Purposes of Criminal Punishment," Modern Law Review, Vol. 21, No. 2, 1958, p. 125.

¹⁴Richard Lempert, "Strategies of Research Design in the Legal Impact Study," Law and Society Review, 1966-67, p. 123.

¹⁵Richard Lempert, Ibid., p. 124.

¹⁶In Connecticut, a speed crackdown was initiated after a year marked by an extremely high number of traffic fatalities. The number of fatalities was smaller for the year which followed the crackdown. The reduction in loss of life was attributed to the increased severity of punishment. Campbell and Ross, however, pointed out that the reduction was due to statistical chance alone; i.e., was due to regression. See Donald T. Campbell and H. Laurence Ross, "The Connecticut Crackdown on Speeding, Time-Series Data in Quasi-Experimental Analysis," Law and Society Review, Vol. 3, 1968-69, pp. 33-53.

¹⁷It differs from a true experimental design insofar as membership in the experimental and control groups is not determined by a random selection procedure.

CHAPTER IV

DATA PROBLEMS IN TESTING DETERRENCE

Regardless of the procedures employed by an investigator, the quality of the data employed will singularly influence his ability to infer the "true" nature of the relationship between the independent and dependent variables. Whenever empirical research is undertaken, therefore, data-associated problems become significant.

The problems associated with the utilization of criminal statistics are especially thorny in that the nature of the criminal act contributes to unreliability in data collection and recording. Most of the empirical work done in criminology has relied upon statistics gathered by governmental agencies. The official statistics that are amenable to empirical research are collected by several levels of government: national, provincial, and local. The sources may be further divided according to the administrative stages at which the statistics are compiled. All of the empirical work done with respect to the death penalty has relied upon these official sources of data.

The Deficiencies of "Official" Statistics

Basically, criminal statistics reflect the operations of those agencies whose task it is to administer the criminal law. Many researchers have attempted to utilize official statistics as measures of the "actual" amount of criminality. When criminal

statistics are so used, a number of problems are created with respect to data collection techniques. A principal difficulty in the employment of official criminal statistics as indexes of criminality is produced by the lack of uniform reporting procedures. It could prove somewhat difficult to study the deterrent effect of the death penalty if uniform practises of reporting and recording homicides are lacking in a specific geographical area. Furthermore, the administration of criminal law in a geographical area may be a localized activity rather than a centralized one.¹ These political facts can create substantial variation in the recording of criminal offenses (in this case homicides) both within subunits of a geographical area and between geographical areas. This problem may be especially acute when an attempt is made to compare nations along the homicide dimension. Consequently, the validity of inferences as to the deterrent effect of the death penalty based upon the comparison of retentionist and abolitionist areas may be questionable unless efforts are made to control for variations in recording practises.

Other problems are created by the utilization of official sources of data. As Sellin pointed out: "The value of a crime rate for index purposes decreases as the distance from the crime itself in terms of procedures increases."² In other words, police records are more reliable indicators of actual crime incidence than court records. The latter, in turn, are more reliable than prison records. It is with an awareness of these facts that researchers studying capital punishment have relied mainly upon homicides

"known to the police." These statistics, however, still represent "secondary" sources of data. That is, the investigator must employ data which he has not himself collected. The utilization of such secondary sources produces a number of difficulties which may adversely influence his ability to infer as to the deterrent effect of the threat of execution.

Variation in Motives for Murder

Who will be deterred? That is the initial question for which an answer must be formulated. Murder is possibly one of the poorest crimes by which to test deterrence. It is commonly recognized that this offense is quite often an emotional or impulsive crime. It is often the regrettable climax of a series of expressive acts in which no consideration is given to the possible consequences. Such murders involve little rational deliberation. Many murders, for example, are the unintended results of quarrels (domestic or otherwise). In his study of homicide in Philadelphia, Wolfgang discovered a substantial amount (26%) of victim-precipitated homicide.³ In addition, he noted a significant association between alcohol and homicide. In 64% of the cases studied, alcohol was present in the homicide situation, i.e., in the victim, in the offender, or in both.⁴ This finding with respect to alcohol underlines the rather direct connection between the eruption of violence and the release of inhibitions, with liquor serving as the release mechanism. Given these considerations it is quite conceivable to hypothesize that many homicides are no more than the end-product of impulsive,

emotional acts not subject to control by reason or by apprehension of the consequences. A proportion of homicides is also committed by severely disturbed or insane individuals. Would such individuals be deterred by the threat of execution? It is debatable whether the threat of capital punishment can deter the types of murder committed by psychological deviates or under the pressure of unusual circumstances.

Theoretically, the deterrent force of the death penalty should be greatest with reference to those murders that are the outcome of rational deliberation and premeditation. These types of reason-guided homicides are instrumental in nature and include such acts as gangland slayings, killings motivated by a desire to collect insurance, and various other profit-motivated murders. A high commitment to a criminal career coupled with a comparatively low risk of detection and apprehension could negate the preventive potential of capital punishment. The possibility of execution could simply become an "occupational risk" (in the case of under-world killings). In any event, such murders may constitute but a small portion of the total number of slayings. It is quite possible that the occurrence of such murders is minimized by the threat of execution. It is equally plausible to hypothesize, however, that few murder for profit regardless of the possible consequences and/or that the risk of detection is low when compared to that of expressive types of murder. Consequently, few instrumental murders may appear in official data sources. It is, as yet, impossible to eliminate either of these hypotheses.

In sum, it may be that the circumstances, the processes which produce the majority of culpable homicides are of such a nature as to minimize the deterrent power, if any, of capital punishment. The threat of loss of life may affect only an unknown proportion of the total number of murders. A problem which then arises is that of extracting those homicides which are theoretically deterrable from general homicide statistics. If the death penalty is effective, then its abolition should produce an increase in the amount of premeditated murder while having no effect upon unpremeditated slayings. What is needed, consequently, is information with respect to the motivation of murder. Secondary data sources offer little information with reference to premeditation.⁵

Hidden Homicide

A critical problem which arises when official criminal statistics are employed is that of coping with "hidden" or "unreported" crime. There exists an unknown amount of criminality which never becomes part of the criminal record. With respect to murder, there exists, of course, a discrepancy between the number of murders committed and the number "known to the police." The likelihood of an offense becoming known to the police depends upon the strength of the social value which is transgressed and the social visibility of the act. Because of the high visibility of the consequences of homicide, and the strong moral proscription against killing, it has been assumed that the aforementioned discrepancy with respect to homicide is rather small. To date, the empirical

work done on capital punishment has relied upon this unproven empirical assumption. It has been suggested, however, that the number of undetected homicides may be larger than had been previously believed. An unknown proportion of hunting and traffic accidents, for example, are reported to be in reality concealed homicides.⁶ Unfortunately, the secondary data sources that have been employed by investigators do not permit an estimation of the amount of undiscovered homicide. Until such time as data can be obtained which will allow for such an estimation, it must be assumed that the volume of undetected homicide bears a constant ratio to the total number of homicides.

Labelling Variations in Homicide Rates

Finally, it must be kept in mind that the labelling of an act as a crime occurs after-the fact. The deterrent power of the criminal sanction influences the occurrence of an act prior to its commission. The labelling of an action as homicide (as well as the degree of homicide) rests ultimately upon the discretion of the police, the prosecutor, the judge, and the jury.

Whether an offender is charged with murder, a lesser offense, or no offense at all, depends upon two factors: the circumstances surrounding the act and the quality of the evidence which is required to produce the desired conviction. In the final analysis, therefore, the prosecution of an act as capital murder, noncapital murder, or manslaughter may be influenced by the proficiency and discretion of the investigating officers and the prosecutor. Of-

ficial homicide statistics will reflect this proficiency and discretion. As a result, they may present a more or less inaccurate picture of actual homicide incidence.

The actions of judges and juries will also be reflected in some secondary sources of homicide data. For example, the outcome of jury deliberations may be influenced by changes (over time) in the definition of homicides to which the death penalty applies. If, for a certain period of time, capital punishment was mandatory upon conviction for capital murder, juries might prove more reticent to convict than would be the case were the penalty of death abolished,⁷ or left to the discretion of the jury.⁸ In addition, it should be remembered that the final decision might be influenced by such factors as the prejudices of an individual jurors, the prevalent public opinion, or simply errors in human judgment.⁹ The above-mentioned factors can affect the final labelling of an act as this or that criminal offense. This labelling process will affect the final form of data categorization and thus, in turn, inferences based upon the data.

In sum, then, problems are created by the use of official, secondary data sources in that they reflect not simply the occurrence of criminal behavior; but rather, they reflect a mixture of the incidence of criminality and the administration of criminal law.

Given the aforementioned considerations, it should be evident that any utilization of secondary (i.e., official) sources of data in an attempt to infer the deterrent efficacy of the death penalty

will be fraught with considerable difficulties. Given the data source, the investigator will be forced to rely upon a number of unproven empirical assumptions. In addition, the data may more accurately reflect the efforts of legal agencies to cope with homicide acts than their actual incidence. What can be done, in the face of these obstacles, to increase the reliability of the data and thus the validity of inference?

An alternative would be the development and utilization of "primary" sources of data. In other words, an attempt would be made to get as close to the homicide act as possible. That is, the investigator would use such resources as personal investigation,¹⁰ death certificates, coroners' reports, the records of insurance companies, and detailed police reports in an attempt to develop a scheme for categorizing homicides. Each death in a geographical area would be extensively studied. Subsequently, a set of taxonomic rules would be employed to categorize each death as: 1) deaths assuredly homicide, 2) deaths possibly homicide, and 3) deaths assuredly not homicide. This scheme could be applied over time and in a number of different areas.

The utilization of such primary data sources would present a number of advantages over the use of secondary statistical sources. Firstly, the data distortion produced by the administration of the criminal law (the labelling process) would be minimized. The investigator would be dealing with homicide incidence only. The discretion of the prosecutor and the human frailties of judge and jury would no longer influence the final data categorization.

Secondly, the development of the aforementioned taxonomy could help improve the criminal law process by pointing out the nature of the evidence required to induce a coroner or a police officer to classify a death as not homicide or as homicide. Those factors in the investigative process which contribute to unreliability in classification could be isolated and perhaps eliminated.¹¹ Thirdly, an intensive examination of the circumstances surrounding the slayings, and possibly the motives of the offender could allow for the division of homicides into premeditated and unpremeditated. As was previously noted, a change in the application of the death penalty should affect the former category of killings and not the latter. Fourthly, the use of primary sources would allow for a study of undetected homicide. The use of secondary data sources necessitates the assumption of an insignificant occurrence of unreported homicide. As was previously mentioned, however, this empirical assumption is unproven. By combining the number of deaths assuredly and possibly homicide, and comparing this amount to the volume of officially recorded homicide, one could calculate the probability of homicide being unreported. By examining each homicide case, the probabilities of various types of homicide (premeditated versus unpremeditated) escaping detection could perhaps be calculated. Finally, primary sources of data would eliminate differences in data recording and reporting which often render impossible the comparison of different geographical areas with respect to homicide. This would remove a difficult problem which confronts investigators utilizing cross-sectional analysis. Furthermore, the

development of these data sources over time would prove beneficial with respect to time series analysis in that the problems produced by changes in the definition of murder over time would also be eliminated. The use of primary sources of data coupled with multiple time series analysis would allow for the strongest test of the deterrent theory of capital punishment.

Unfortunately, there remains the question of feasibility (time and money). Both the public and their political representatives are often unwilling to wait until the necessary data sources and research procedures are developed. They demand much more immediate answers to policy questions. It is true that the development of a primary data source amenable to time series analysis would require a considerable amount of time and effort. However, even if such a data source could only be developed for one area over a short period of time, its development is recommended. At the very least, it would allow the investigator to examine the empirical worth of the assumptions that are necessitated by the use of secondary data sources. All in all, the use of primary sources of data in the examination of the deterrent force of capital punishment would prove valuable.

FOOTNOTES

¹Richard Quinney, The Problem of Crime, Dodd, Mead & Company, New York, 1970, p. 113.

²Thorsten Sellin, "The Basis of a crime Index," Journal of Criminal Law, Criminology and Police Science, Vol. 22, 1931, p. 346.

³The term victim-precipitated can be applied to those homicides in which the victim is a direct, positive, precipitator in the crime. Marvin E. Wolfgang, Patterns of Criminal Homicide, John Wiley & Sons, New York, 1958, p. 252.

⁴Ibid., p. 137.

⁵Secondary data sources give little information with respect to premeditation. In Canada, some information on premeditation is available. However, the test applied is not whether the murder was "planned or deliberate," but rather, whether the murder itself, as distinguished from the robbery or event giving rise to it, was premeditated a significant time in advance of committing it. See Guy Favreau, Capital Punishment Material Relating to its Purpose and Value, Queen's Printer, Ottawa, 1965, p. 103.

⁶"Probably most murders go undetected. For example, a very large proportion of hunting accidents are apparently murders; an investigation showing this was suppressed, however." Oskar Morgenstern, On the Accuracy of Economic Observations, 2nd ed., Princeton University Press, New Jersey, 1963, p. 23.

⁷Many well-informed penologists have claimed that the mandatory sentence of death results in more acquittals. Convincing data on this subject are not available. Herbert B. Ehrmann, "The Death Penalty and the Administration of Justice." in Thorsten Sellin, ed., Capital Punishment, Harper & Row, New York, 1967, p. 193.

⁸"Degrees of murder were introduced into the law originally in order to give juries an opportunity to mitigate the harshness of the death penalty. No doubt in many cases they have accomplished their purpose. Some juries find second degree despite the facts and the judge's instructions; other juries, more conscientious than merciful, find first degree where warranted; still others muddle through the

"mystifying psychology" to a bewildered finish. In conjunction with the death penalty, these degrees of murder have created a combination which tends to produce a most haphazard application of the criminal law in capital cases." H. Bedau, The Death Penalty in America, Anchor Books, New York, 1967, p. 249.

⁹Herbert B. Ehrmann, op. cit., p. 205.

¹⁰Personal investigation involves more than the examination of official records by the researcher. It could also comprise the participant observation of the investigation of deaths by the coroner and police officers.

¹¹The reliability of such a taxonomy could be checked in a number of ways. It could be compared to the classifications developed by the police and the coroner. In addition, experienced police officers could classify deaths using the taxonomic rules. The degree of comparability between the various calssifications would provide a measure of reliability.

CHAPTER V

MODELS OF ANALYSIS

This chapter will put forth two models for the analysis of the deterrent influence, if any, of capital punishment. The construction of such research designs is timely in the sense that it relates to a practical problem which will confront the Canadian government in the near future. In the past few decades, Canadians have witnessed a steady downward trend in the imposition of the death penalty. In 1967, the government of Canada modified the use of capital punishment for a trial period of five years.¹ As the trial period draws to a close, the need will arise for an evaluation of the effect of the modification of the death penalty upon homicide incidence. This chapter will endeavour to formulate instruments which could permit such an assessment.

Theoretical Framework

According to the deterrence theory, people refrain from crime, among other reasons, because they fear punishment. It is claimed that potential homicide offenders are discouraged by the possible cost attached to the homicide act, i.e., by the presence of the death penalty. Consequently, a reduction in the threat of execution² should produce an increase in the incidence of culpable homicide. The deterrent force, if any, of the death penalty should be particularly effective with respect to rationally calculated, preconceived murders. Reduction in

the threat of execution should produce an increase in the incidence of this type of homicide. The hypotheses of interest, therefore, are:

H1 - the reduction in the frequency of imposition of the death sentence has produced an increase in the incidence of culpable homicide in Canada.

H2 - the reduction in the frequency of imposition of the death sentence has produced an increase in the incidence of premeditated homicide in Canada.

H3 - the reduction in the frequency of execution has produced an increase in the incidence of culpable homicide in Canada.

H4 - the reduction in the frequency of execution has produced an increase in the incidence of premeditated homicide in Canada.

The null hypotheses are:

- the reduction in the frequency of imposition of the death sentence has not produced an increase in the incidence of culpable homicide in Canada.

- the reduction in the frequency of imposition of the death sentence has not produced an increase in the incidence of premeditated homicide in Canada.

- the reduction in the frequency of execution has not produced an increase in the incidence of culpable homicide in Canada.

- the reduction in the frequency of execution has not produced an increase in the incidence of premeditated homicide in Canada.

With respect to these hypotheses, the dependent variables to be examined are: a) the rate of culpable homicide per 100,000 population seven years of age and over³ in Canada; b) the rate of premeditated

homicide per 100,000 population seven years of age and over in Canada; c) the rate of imposition of the death sentence per 100,000 population seven years of age and over in Canada; d) the rate of execution per 100,000 population seven years of age and over in Canada.

Research Procedure

A time series analysis approach should prove valuable in testing the deterrent effect, if any, of the reduction of the threat of execution. A time series is a set of data ordered in time. Usually, the observations are made at regular intervals. The analysis of the time series consists of the description and measurement of the various changes that appear in the series during a period of time.⁴ This analytic approach presents fewer problems associated with data collection than does multiple time series analysis.⁵ In addition, its ability to document long-term trends and its ability to control for statistical regression render its utilization preferable to that of cross-sectional analysis.

Two models of analysis will be presented. Model I is based upon the utilization of "secondary" sources of data, i.e., upon homicide data assembled by various law enforcement agencies throughout Canada. It is thus subject to the problems associated with the use of "official" criminal statistics. These problems were discussed in the previous chapter. Of special importance is the problem of discretion. The exercise of discretion, i.e., personal judgment, affects every aspect of the criminal law process. For example, Pilavian and Briar, in studying police encounters with juveniles,

discovered that decisions to arrest juveniles were based largely upon cues from which the officer inferred a youth's character. Cues such as demeanor, group affiliation, age, race, grooming, and dress were found to be more influential in determining the probability of arrest than actual law violation.⁶ Because the exercise of discretion involves decision-making not strictly governed by legal rules, but rather with a significant element of personal judgment, official criminal statistics will be affected by these unreliable, subjective factors which operate throughout the process of criminal investigation.

Given the influence of discretion in police investigation, "extra-juridical" investigation is recommended in the categorization of deaths. A second model of analysis (Model II) is presented which is based upon the employment of "primary" sources of data. This research procedure avoids the pitfalls associated with the use of secondary data sources. It thus permits a stronger test of the deterrence hypothesis with respect to the presence of the death penalty. However, because of the impossibility of applying this analytic model to the time period 1950 to 1972, a more feasible research procedure (Model I) is recommended. This model of analysis permits a weaker test that can modestly inform the public and their legislators of the effect of variation of the imposition of the death sentence and rate of execution upon the incidence of culpable and premeditated homicide.

Model of Analysis I

The data utilized in the weaker test of the deterrence hypotheses would consist of the total number of detected premeditated and

culpable homicides in Canada during the period of investigation (1950-1972).⁷ Determination of deaths which are premeditated homicides and culpable homicides requires utilization of the records of the homicide units in the police departments of major Canadian cities and the homicide records of the R.C.M.P. In each instance where a death arouses the suspicion of the police, extensive investigations are undertaken. All deaths which result in such investigations can be classified as possible homicides. The police, after their investigations, classify deaths as homicide or not homicide. A death is classified as a homicide when police investigation reveals that the demise of a human being was the direct or indirect result of the actions of another human being. Homicides are then subdivided into culpable and not culpable. Not culpable homicides refer to justifiable and accidental slayings, and are not considered offenses. Culpable homicides comprise capital and non-capital murder, manslaughter, and infanticide.⁸ Annual rates per 100,000 population seven years of age and over in Canada are computed using those deaths classified as culpable homicides. In addition, the law enforcement agencies classify homicides as premeditated or unpremeditated. An examination of the circumstances surrounding the death and testimony from the witnesses and the accused are used to determine whether the death was premeditated, i.e., whether the assailant intended to cause death. Annual rates per 100,000 population seven years of age and over in Canada are computed using those homicides categorized as premeditated.

In addition, annual rates of the imposition of the death sentence in Canada, and annual execution rates are calculated per 100,000

population seven years of age and over.

The time series model involves a consideration of the occurrence of culpable and premeditated homicide for a period of 23 years from 1950 to 1972 inclusively. Graphs are plotted of:

- the annual rates of culpable homicide from 1950 to 1972;
- the annual rates of premeditated homicide from 1950 to 1972;
- the annual rates of the imposition of the death sentence from 1950 to 1972;
- the annual rates of execution from 1950 to 1972.

The graphs allow the researcher to examine the respective trends associated with these variables during the period of investigation.

Regression analysis⁹ is recommended to determine the nature or form of the relationship between: a) variation in the imposition of the death sentence and the incidence of culpable homicide; b) variation in the imposition of the death sentence and the incidence of premeditated homicide; c) variation in the rate of execution and the incidence of culpable homicide; d) variation in the rate of execution and the incidence of premeditated homicide. According to deterrence theory, linear relationships should exist between these variables. The method of least squares regression is employed to determine whether such linearity exists.

Not only is it important to know the form of the relationship between variables, but it is also necessary to determine the strength of the relationship between an independent and a dependent variable. Consequently, correlation coefficients¹⁰ are calculated to determine:

a) the amount of variation in the incidence of culpable homicide explained by variation in the rate of imposition of the death sentence; b) the amount of variation in the incidence of premeditated homicide explained by variation in the rate of imposition of the death sentence; c) the amount of variation in the incidence of culpable homicide explained by variation in the rate of execution; d) the amount of variation in the incidence of premeditated homicide explained by variation in the rate of execution. The F test is applied to the calculated correlation coefficients in order to ascertain their significance.¹¹

An attempt must also be made to take into account the possibility of reaction lag problems. In undertaking a legal impact study the researcher must be cognizant of the possibility of a lag period between a change in the law or its implementation and the impact of that change, if any, upon the behavior of the populace. For example, abolition of capital punishment might have no immediate impact upon homicide incidence. Rather, the impact of abolition upon homicide occurrence may only take effect subsequent to a lag period of a number of months or years. This possibility also exists with respect to the reduction of the imposition of the death sentence and rate of execution. In an attempt to cope with reaction lag problems, lag correlations are calculated for the regression of reduction in the imposition of the death sentence and rate of execution on the incidence of culpable and premeditated homicide lagged for a number of years.¹²

Model of Analysis II

As was previously mentioned, the first model of analysis is based upon the utilization of secondary sources of data. A stronger test of the deterrence theory can be devised utilizing "primary" sources of data.

Primary homicide data is assembled by a team or teams of researchers whose task it is to investigate each death in Canada. These researchers work in close cooperation with provincial coroners and with various police departments. The initial step in the investigative process involves the all-important determination of the cause of death. Personal investigation, medical autopsies, and the examination of death certificates would be utilized to ascertain cause of death. If the preliminary investigations reveal that death was not the direct or indirect result of the actions of another human being, the death is classified as "not homicide."¹³ If, on the other hand, the evidence suggests that death may have resulted from the direct or indirect actions of another individual, the death is classified as "possibly homicide" and extensive investigations are undertaken.¹⁴ An attempt is made to recreate the circumstances contributing to and surrounding the actual moment of death. Information pertaining to the life history of the deceased is accumulated. Friends and relatives of the victim are interviewed. Those individuals who may have witnessed the death are intensively interviewed. If, on the basis of these investigations the researchers can gather enough evidence which points to human activity (other than the victim's) as causing death, the death

is reclassified as "homicide". These homicides are then subdivided into culpable and not culpable homicides. Those homicides which are not justifiable or accidental are termed culpable. Further investigations are undertaken in order to determine whether the killing was premeditated or unpremeditated. Concerted efforts are made to determine the motives which led to the crime. An attempt is made to discover whether the assailant (known or unknown) intended, i.e., planned in advance, the slaying of the victim. If the assailant is known, interviews are conducted in order to record his version of the offense and his motives. If the evidence indicates intent, the homicide is classified as premeditated.

Such procedures can be employed to develop primary sources of homicide data. The contribution that "extra-juridical" investigation can make to the deterrence argument is directly related to the degree of reliability and objectivity which can be built into the procedures utilized in investigating and categorizing deaths. An attempt must be made to minimize the possible influences of discretion. A set of rules for categorizing deaths must be constructed in such a manner as to maximize the reliability of death investigation throughout Canada. Rules and techniques must be developed in order that researchers in Montreal investigate and categorize deaths in the same manner as researchers in Edmonton. In other words, a high degree of inter-observer reliability is essential.

A number of factors such as observer variability, observer bias, errors in the collection and recording of data can operate to reduce the reliability of primary data sources. A number of procedures

can be implemented, however, in order to maximize reliability.¹⁵ First, the investigators are trained very carefully. The better trained the observer, the less likely he is to make biased observations. A training program would be developed whose purpose it would be to teach investigators the correct techniques of homicide investigation. Such a program could include the investigation of both real and simulated homicides. Special emphasis would be placed upon scientific techniques of observation and recording. Second, the investigator's task would be specified as closely as possible. Third, the investigators would be guided in their examinations by a set of detailed instructions with respect to the categorization of deaths. Such instructions would greatly reduce the influence of discretion. A number of pilot studies would be undertaken prior to the actual investigations in order to formulate a detailed set of rules for classifying deaths. These taxonomic rules would be clear, concise, and exhaustive. The instructions would be developed in such a manner as to reduce to a minimum the possible classification errors produced by personal judgment. Fourth, immediate and detailed reporting would be required whenever possible. The investigators would be required to take on-the-spot notes and to record their notes every day. This procedure will reduce the possibility of memory errors. Fifth, mechanical devices such as cameras and tape recorders would be employed to minimize bias and inaccuracy. These permanent records can be checked later against the investigator's observations and thus act as reliability measures. Finally, a team of investigators would investigate each death and compare their observations. Homicide data collected in this manner

should be compiled over an extended period of time (1975-2000).

The implementation of such procedures would guarantee a high degree of inter-observer reliability. Given the hypotheses previously set forth, the methodological procedures recommended in the first model of analysis can be employed in order to determine empirically the effect of change in the imposition of the death sentence and rate of execution upon the occurrence of culpable and premeditated homicide.

Conclusion

The square of the correlation coefficient can be interpreted as the proportion of the total variation in the dependent variable explained by the independent variable. If the calculated correlation coefficients in either Model I or Model II are found to be significant, then the null hypotheses can be rejected. The results can be interpreted as demonstrating that a decrease in the frequency of the imposition of the death sentence and/or the rate of execution has produced an increase in the incidence of culpable and premeditated homicide.

If, on the other hand, the coefficients are not significant, the null hypotheses cannot be rejected. A nonsignificant coefficient implies a large amount of variation in the dependent variable which is unexplained by the independent variable. The proportion of the unexplained variation is influenced by two factors: errors in the measurement of the variables, and/or the influence of variables other than the independent variable upon the dependent variable.

If the correlation coefficients are not significant, the unexplained variation can be accounted for, at least in part, by errors in the collection of homicide data, the computation of the annual rates, or the calculation of the coefficients. In this case, it is correct to maintain that the investigator has failed to demonstrate deterrence.

In addition, however, there exist a number of variables other than the legal ones, which could affect the occurrence of homicide. Demographic changes in the age structure, sex structure, or ethnic composition of the population might alter homicide incidence. Changes in socio-cultural variables might also produce variation in homicide occurrence. Furthermore, independent historical factors such as the institution of firearms-control regulations could affect homicide rates. If the amount of unexplained variation is large, it may be that such factors as those mentioned above are as influential, or perhaps, more influential in influencing the amount of homicide commission than any change in the frequency of imposition of the death sentence or rate of execution. Since such variables as those mentioned above could affect homicide rates, partial correlations¹⁶ controlling for a number of these factors (e.g., age and sex) can be calculated in order to test for possible spurious relationships.

It must be kept in mind, however, that a failure to demonstrate deterrence is not to be interpreted as proof of non-deterrence. It is a popular practice, common among journalists in particular, to infer no deterrent effect from a failure of research to demonstrate deterrence

beyond a reasonable doubt. Such inference is inappropriate, and it deserves emphasis that the inability of collected data to show a deterrent effect means only that. It would be illogical, and perhaps unrealistic, to assume from this failed proof that no one was ever deterred from committing homicide by fear of capital punishment.

Epilogue

The death penalty debate cannot be settled solely on the basis of deterrence. The deterrent force, if any, of its imposition is an insufficient argument for either the retention or abolition of capital punishment. There are a number of other relevant factors which must be taken into consideration. Although the threat of execution may prove to be of little deterrent utility, there are a number of alternative, non-deterrent functions whose performance may prove valuable.¹⁷ The extermination of certain criminals, for example, can insure society against their involvement in any future criminal activities. In addition, their execution can eliminate the possible adverse influences that these transgressors might exert upon other inmates or upon the public at large. More importantly, capital punishment provides an extremely vivid example of "justice" in action. The retributive objectives of punishment are admirably bolstered by the state's taking of human life. For some observers it is said that each murderer's death re-emphasizes the sanctity of human life. The imposition of the death penalty thus becomes a highly dramatic device by which religious and ethical proscriptions against the slaying of one's fellow man are reinforced.

As can be readily appreciated, therefore, the issue of capital punishment is comprised of a plurality of mutually reinforcing, as well as conflicting, objectives. Deterrence is but one of a number of justifications. The other justifications with respect to the employment of the death penalty must be acknowledged. Such recognition, however, need not lead to the intellectual resolution of the question of the deterrent efficacy of the death penalty.

FOOTNOTES

¹More precisely, execution was abolished for all culpable homicides with the exception of those involving the slaying of police officers and prison personnel. In actual practise, however, no one has been executed during the five year trial period.

²By reduction in the threat of execution is meant both reduction in the imposition of the death sentence, and reduction in the rate of execution.

³The population base is restricted to persons seven years of age and over because the criminal code maintains that no person shall be convicted of an offense while he is under the age of seven years. See The Criminal Code, The Carswell Company, Toronto, 1969, p. 10.

⁴Herbert Arkin and Raymond R. Cotton, Statistical Methods, 4th ed., Barnes & Noble, Inc., New York, 1963, p. 43.

⁵A principal difficulty in the utilization of criminal statistics involves the lack of uniform reporting and recording procedures. Time series analysis confronts the problem of possible data variation within a geographical area. Multiple time series analysis, however, confronts the problem of possible data variation both within and between geographical areas.

⁶Irving Piliavin and Scott Briar, "Police Encounters with Juveniles," American Journal of Sociology, Vol. 70, 1964, p. 210. For other discussions of police discretion, see Joseph Goldstein, "Police Discretion Not to Invoke the Criminal Process: Low-Visibility Decisions in the Administration of Justice," pp. 166-184, and Wayne R. Lafave, "Noninvocation of the Criminal Law by Police," pp. 185-208, in Donald R. Cressey and David A. Ward, Delinquency, Crime and Social Process, Harper & Row, New York, 1969. For a discussion of the influence of discretion in bail setting, see Frederic Suffet, "Bail Setting: A Study of Courtroom Interaction," in Richard Quinney, Crime and Justice in Society, Little, Brown and Company, Boston, 1969, pp. 292-307. For discussion of judicial discretion, see Stuart S. Nagel, "Judicial Backgrounds and Criminal Cases," in Richard Quinney, ibid., pp. 384-395.

⁷With respect to undetected homicide, it must be assumed that there exists a constant ratio between the number of undetected homicides and the total number of homicides. Because the amount of undetected homicide is unknown, this assumption is a necessary, albeit weak, one. Should the amount of undetected homicide prove to be significant, inferences based solely upon the number of detected homicides could prove inaccurate. For a discussion of hidden homicides, see Chapter IV.

⁸For definitions of the various types of culpable homicide, see The Criminal Code, The Carswell Company Limited, Toronto, 1969, p. 87.

⁹For a discussion of the least-squares method of regression analysis see Hubert M. Blalock, Jr., Social Statistics, McGraw-Hill Book Company, New York, 1960, pp. 273-284. See also Murray R. Spiegel, Theory and Problems of Statistics, McGraw-Hill Book Company, New York, 1961, pp. 217-240.

¹⁰For a discussion of the correlation coefficient, see Hubert M. Blalock, Jr., Social Statistics, McGraw-Hill Book Company, New York, 1960, pp. 285-299. It should be kept in mind that correlation coefficients are sensitive to sample size. That is, correlation becomes a weak test of association when small samples are employed. Should the sample size prove too small for the use of correlation, the sample size should be increased, if possible, or a t test or a chi-square test could be substituted. See Murray R. Spiegel, op. cit., pp. 188-198.

¹¹For a discussion of the F test, see Hubert M. Blalock, Jr., ibid., pp. 302-305.

¹²The task at hand is complicated by the fact that the lag period is unknown, and therefore has to be estimated. Deterrence theory gives the investigator no clue as to the length of the lag period. In an attempt, therefore, to obtain the maximum lag correlation, correlations are calculated for a maximum of such lag periods as common-sense and behavioral theory might suggest.

¹³Examples of such deaths include demise from old age or from disease.

¹⁴Examples of such deaths include hunting and traffic accidents, deaths by shooting, beating, stabbing, or poison.

¹⁵ Julian L. Simon, Basic Research Methods in Social Science, Random House, New York, 1969, p. 88.

¹⁶ For a discussion of partial correlation, see Hubert M. Blalock, Jr., op. cit., pp. 330-346.

¹⁷ Hugo Bedau, "Deterrence and the Death Penalty: A Reconsideration," Journal of Criminal Law, Criminology and Police Science, Vol. 61, 1970, p. 541.

BIBLIOGRAPHY

A. BOOKS

¹Arkin Herbert and Raymond R. Cotton, Statistical Methods, 4th ed., Barnes and Nobel, Inc., New York, 1963.

²Becker, Howard S., Outsiders, New York; The Free Press, 1963.

³Bedau, Hugo Adam, The Death Penalty in America, New York: Anchor Books, 1967.

⁴Blalock, Hubert M., Jr., Social Statistics, McGraw-Hill Book Company, New York, 1960.

⁵Borchard, Edwin M., Convicting the Innocent, New Haven: Yale University Press, 1932.

⁶Cameron, Mary Owen, The Booster and the Snitch, New York: The Free Press, 1966.

⁷Campbell, Donald T. and Julian C. Stanley, Experimental and Quasi-Experimental Designs for Research, Rand McNally & Company, Chicago, 1963.

⁸Camus, Albert, Resistance, Rebellion, and Death, translated by Justin O'Brien, New York: Alfred A. Knopf, 1966.

⁹Chambliss, William J., Crime and the Legal Process, New York: McGraw-Hill, 1969.

¹⁰Clinard, Marshall B., The Black Market, New York: Rinehart & Company, Inc., 1952.

¹¹Cohen, Albert K., Deviance and Control, New Jersey: Prentice-Hall Inc., 1966.

¹²Coser, Lewis, The Functions of Social Conflict, New York: The Free Press, 1966.

¹³ Cressey, Donald R., and David A. Ward, Delinquency, Crime and Social Process, Harper & Row, New York, 1969.

¹⁴ Dann, Robert H., "The Deterrent Effect of Capital Punishment, Friends' Social Service Series, Bulletin No. 29, 1935.

¹⁵ Davis, James F., Henry H. Foster Jr., C. Ray Jeffery, E. Eugene Davis, Society and the Law New Meanings for an Old Profession, New York: The Free Press, 1962.

¹⁶ Erikson, Kai T., The Wayward Puritans, New York: John Wiley & Sons, 1966.

¹⁷ Fuller, Lon L., The Morality of Law, New Haven: Yale University Press, 1964.

¹⁸ Hall, Jerome, General Principles of Criminal Law, 2nd ed., Indianapolis, 1960.

¹⁹ Hart, H. L. A., Law, Liberty and Morality, New York: Vintage Books, 1963.

²⁰ Middendorf, Wolf, The Effectiveness of Punishment Especially in Relation to Traffic Offenses, New Jersey: Fred B. Rothman & Co., 1968.

²¹ Moberly, Sir Walter, The Ethics of Punishment, London: Faber & Faber, 1968.

²² Morgenstern, Oskar, On the Accuracy of Economic Observations, 2nd ed., New Jersey: Princeton University Press, 1963.

²³ Murder Statistics 1969, Dominion Bureau of Statistics, Ottawa: The Queen's Printer, 1970.

²⁴ Packer, Herbert L., The Limits of the Criminal Sanction, California: Stanford University Press, 1968.

²⁵ Quinney, Richard, Crime and Justice in Society, Little, Brown and Company, Boston, 1969.

²⁶ Quinney, Richard, The Problem of Crime, Dodd, Mead & Company, New York, 1970.

- ²⁷ Savitz, Leonard, Dilemmas in Criminology, New York: McGraw-Hill, 1967.
- ²⁸ Sellin, Thorsten (ed.), "Murder and The Penalty of Death," The Annals of the Academy of Political and Social Science, Vol. 284, 1952.
- ²⁹ _____, Thorsten (ed.), Capital Punishment, New York: Harper & Row, 1967.
- ³⁰ Selltitz, Clarie, Marie Jahoda, Morton Deutsch, Stuart W. Cook, Research Methods in Social Relations, Revised Edition, Holt, Rinehart and Winstron, New York, 1959.
- ³¹ Simon, Julian L., Basic Research Methods in Social Science, Random House, New York, 1969.
- ³² Spiegel, Murray R., Theory and Problems of Statistics, McGraw-Hill Book Company, New York, 1961.
- ³³ Sutherland, Edwin H. and Donald R. Cressey, Principles of Criminology, 8th ed., New York: J. B. Lippincott Company, 1970.
- ³⁴ Taft, Donald R. and Ralph W. England, Jr., Criminology, 4th ed., New York: The Macmillan Company, 1964.
- ³⁵ The Criminal Code, The Carswell Company Limited, Toronto, 1969.
- ³⁶ Tintner, Gerhard, Econometrics, John Wiley & Sons, Inc., New York, 1952.
- ³⁷ Turk, Austin, Criminality and Legal Order, Chicago: Rand McNally & Company, 1969.
- ³⁸ Weiss, Robert S., Statistics in Social Research An Introduction, John Wiley & Sons, Inc., New York, 1968.
- ³⁹ Wolfgang, Marvin E., Patterns of Criminal Homicide, New York: John Wiley & Sons, 1958.

B. ARTICLES

⁴⁰Akman, Dogan K., "Homicides and Assaults in Canadian Prisons," in Thorsten Sellin, ed., Capital Punishment, Harper & Row, New York, 1967, pp. 161-168.

⁴¹Allen, Francis A., "Criminal Justice, Legal Values and the Rehabilitative Ideal," in Richard Quinney, Crime and Justice in Society, Boston: Little, Brown and Company, 1969, pp. 449-459.

⁴²Andenaes, Johannes, "General Prevention - Illusion or Reality?", Journal of Criminal Law, Criminology and Police Science, Vol. 43, 1952, pp. 176-198.

⁴³Ball, John C., "The Deterrence Concept in Criminology and Law," Journal of Criminal Law, Criminology and Police Science, Vol. 46, 1955, pp. 347-354.

⁴⁴Bedau, Hugo Adam, "Deterrence and the Death Penalty: A Reconsideration," Journal of Criminal Law, Criminology and Police Science, Vol. 61, 1970, pp. 539-548.

⁴⁵Caldwell, Robert C., "Why is the Death Penalty Retained?", in Thorsten Sellin, ed., "Murder and the Penalty of Death," The Annals, Vol. 284, 1952, pp. 45-53.

⁴⁶Campbell, Donald T., and Laurence H. Ross, "The Connecticut Crackdown on Speeding, Time-Series Data in Quasi-Experimental Analysis," Law & Society Review, Vol. 3, 1968-69, pp. 33-53.

⁴⁷Campion, Donald R., "Does the Death Penalty Protect State Police?" in Hugo Adam Bedau, The Death Penalty in America, New York: Anchor Books, 1967, pp. 301-315.

⁴⁸Chambliss, William J., "The Deterrent Influence of Punishment," Crime and Delinquency, Vol. 12, 1966, pp. 70-75.

⁴⁹Cohen, Albert K., "Sociology of the Deviant Act: Anomie Theory and Beyond," American Sociological Review, Vol. 30, 1965, pp. 5-14.

⁵⁰Crowther, Carol, "Crimes, Penalties, and Legislatures," in "The Future of Corrections," The Annals, Vol. 381, 1969, pp. 147-158.

⁵¹Dann, Robert H., "Capital Punishment in Oregon," in Thorsten Sellin, ed., "Murder and the Penalty of Death," The Annals, Vol. 284, 1952, pp. 110-114.

⁵²Durkheim, Emile, "The Normal and the Pathological," in Marvin E. Wolfgang, Leonard B. Savitz, & Norman Johnston, The Sociology of Crime and Delinquency, 2nd ed., New York: John Wiley & Sons, 1970, pp. 11-15.

⁵³Ehrmann, Herbert B., "The Death Penalty and the Administration of Justice," in Thorsten Sellin, ed., Capital Punishment, New York: Harper & Row, 1967, pp. 189-206.

⁵⁴Favreau, Guy, "Capital Punishment, Material Relating to Its Purpose and Value," Ottawa: Queen's Printer, 1965.

⁵⁵Gardiner, Gerald, "The Purposes of Punishment," Modern Law Review, Vol. 21, 1958, pp. 120-121.

⁵⁶Garfinkel, Harold, "Conditions of Successful Degradation Ceremonies," in Earl Rubington & Martin S. Weinberg, ed., Deviance - An Interactionist Perspective, New York: The Macmillan Company, 1969, pp. 189-192.

⁵⁷Giardini, G. I., and R. C. Farrow, "The Paroling of Capital Offenders," in Thorsten Sellin, ed., "Murder and the Penalty of Death," The Annals, 1952, pp. 85-94.

⁵⁸Goldstein, Joseph, "Police Discretion Not to Invoke the Criminal Process: Low-Visibility Decisions in the Administration of Justice," in Donald R. Cressey and David A. Ward, Delinquency, Crime and Social Process, Harper & Row, New York, 1969, pp. 166-184.

⁵⁹Greenberg, J. and J. Himmelstein, "Varieties of Attack on the Death Penalty," Crime and Delinquency, Vol. 15, 1969, pp. 112-120.

⁶⁰Grunhut, Max, "Murder and the Death Penalty in England," in Thorsten Sellin, "Murder and the Penalty of Death," The Annals, Vol. 284, 1952, pp. 158-166.

⁶¹Guillot, Ellen Elizabeth, "Abolition and Restoration of the Death Penalty in Missouri," in Thorsten Sellin, ed., "Murder and the Penalty of Death," The Annals, Vol. 284, 1952, pp. 105-109.

⁶²Hayner, Norman S., and John R. Cranor, "The Death Penalty in Washington State," in Thorsten Sellin, ed., "Murder and the Penalty of Death," The Annals, Vol. 284, 1952, pp. 101-104.

⁶³Koeninger, R. C., "Capital Punishment in Texas, 1924-1968," Crime and Delinquency, Vol. 15, 1969, pp. 132-141.

⁶⁴Lafave, Wayne R., "Noninvocation of the Criminal Law by Police," in Donald R. Cressey and David A. Ward, Delinquency, Crime and Social Process, Harper & Row, New York, 1969, pp. 185-208.

⁶⁵Lemert, Edwin, "The Behavior of the Systematic Check Forger," Social Problems, 1958, pp. 141-148.

⁶⁶Lempert, Richard, "Strategies of Research Design in the Legal Impact Study," Law and Society Review, Vol. 1, 1966-67, pp. 111-132.

⁶⁷Nagel, Stuart S., "Judicial Backgrounds and Criminal Cases," in Richard Quinney, Crime and Justice in Society, Little, Brown and Company, Boston, 1969, pp. 384-395.

⁶⁸Nettler, Gwynn, "Knowing and Doing," unpublished paper presented to the Conference on Social Science Research and Social Policy, 1971.

⁶⁹Oberer, Walter E., "The Death Penalty and Fair Trial," in Thorsten Sellin, ed., Capital Punishment, New York: Harper & Row, 1967, pp. 220-226.

⁷⁰Piliavin, Irving and Scott Briar, "Police Encounters with Juveniles," American Journal of Sociology, Vol. 70, 1964, pp. 188-212.

⁷¹Pollak, Otto, "Errors in Justice," in Thorsten Sellin, ed., Capital Punishment, New York: Harper & Row, 1967, pp. 207-220.

⁷²Ray, Marsh B., "The Cycle of Abstinence and Relapse Among Heroin Addicts," in Howard S. Becker, The Other Side, New York: The Free Press, 1964, pp. 163-177.

⁷³Reckless, Walter C., "The Use of the Death Penalty, A Factual Statement," Crime and Delinquency, Vol. 15, 1969, pp. 43-56.

⁷⁴Samuelson, Glenn W., "Why was Capital Punishment Restored in Delaware?," Journal of Criminal Law, Criminology and Police Science, Vol. 60, No. 2, 1969, pp. 148-151.

⁷⁵Savitz, Leonard, "A Study of Capital Punishment," Journal of Criminal Law, Criminology and Police Science, Vol. 49, 1958, pp. 338-341.

⁷⁶Schuessler Karl F., "The Deterrent Influence of the Death Penalty," in Thorsten Sellin, ed., "Murder and the Penalty of Death," The Annals, 1952, pp. 54-63.

⁷⁷Sellin, Thorsten, "Executions in the United States," Capital Punishment, New York: Harper & Row, 1967, pp. 31-35.

⁷⁸_____, Thorsten, "Experiments with Abolition," Capital Punishment, New York: Harper & Row, 1967, pp. 122-124.

⁷⁹_____, Thorsten, ed., "Homicides in Retentionist and Abolitionist States," Capital Punishment, New York: Harper & Row, 1967, pp. 135-138.

⁸⁰_____, Thorsten, ed., "The Death Penalty and Police Safety," Capital Punishment, New York: Harper & Row, 1967, pp. 138-154.

⁸¹_____, Thorsten, ed., "Prison Homicides," Capital Punishment, New York: Harper & Row, 1967, pp. 154-160.

⁸²Stanton, John M., "Murderers on Parole," Crime and Delinquency, Vol. 15, 1969, pp. 149-155.

⁸³Suffet, Frederic, "Bail Setting: A Study of Courtroom Interaction," in Richard Quinney, Crime and Justice in Society, Little, Brown and Company, Boston, 1969, pp. 292-307.

⁸⁴Sutherland Edwin, H., "Murder and the Death Penalty," Journal of Criminal Law, Criminology and Police Science, 1925, pp. 516-523.

⁸⁵Van Den Haag, Ernest, "On Deterrence and the Death Penalty," Journal of Criminal Law, Criminology and Police Science, Vol. 60, 1969, pp. 141-147.

⁸⁶Wolfgang, Marvin E., Arlene Kelly, and Hans C. Nolde, "Comparison of the Executed and the Commuted Among Admissions to Death Row," in R. Quinney, Crime and Justice in Society, Boston: Little, Brown and Company, 1969, pp. 500-517.

B29990